First Quarter Changes in Interest Rates

U.S. Treasury rates decreased slightly across most maturities between the fourth quarter of 2009 and the first quarter of 2010. The yield on the six-month bill increased 4 basis points, rising to 0.24%, while the yield on the two-year note decreased 12 basis points, falling to 1.02%. The yield on the ten-year note decreased to 3.84% while the yield on the thirty-year bond increased to 4.72%. As a result of these interest rate changes, the yield curve steepened slightly in the first quarter, as the spread between the yield on the ten-year note and the yield on the two-year note increased from 271 basis points in December to 282 basis points in March. Although the spread has narrowed since the end of the first quarter, it remains well above the historical average and indicates of a very steep yield curve. 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.

Throughout the second quarter of this year, developments in Greece and Europe have had a significant effect on capital markets in the United States. In particular, Treasury rates have decreased since the end of the first quarter at least partly in response to investors seeking safe assets. The ten-year Treasury yield, for example, has declined 87 basis points since the end of the first quarter, falling to 2.97% as of second quarter-end. As developments in
Europe progress, capital markets in the United States will continue to be influenced.

Changes in LIBOR/Swap rates were mixed in the first quarter of 2010. Three-month and six-month LIBOR rates increased slightly, rising to 0.29% and 0.44%, respectively. In contrast, two-year and ten-year swap rates decreased 25 basis points and 18 basis points, falling to 1.21% and 3.83%.

Similar to previous quarters, the Federal Reserve maintained the target federal funds rate within a range of 0-0.25% throughout the first quarter. Since the end of the first quarter, the Federal Open Market Committee (FOMC) has decided to maintain this target range at both of its monetary policy meetings (April and June) and has preserved language in its statement to indicate low interest rates will be likely for an “extended period.” Federal Reserve Bank of Kansas City President, Thomas Hoenig, has opposed the rate decision at each of the last four FOMC meetings because of the “extended period” language. As indicated in the FOMC statement, Hoenig claims “an extended period [is] no longer warranted because it could lead to a build-up of future imbalances and increase risks to longer-run macroeconomic and financial stability, while limiting the Committee’s flexibility to begin raising rates modestly.”

The Mortgage Market and the Thrift Industry

The Federal Reserve completed its agency mortgage-backed securities (MBS) purchase program, as scheduled, at the end of the first quarter. The Fed reached its final target of $1.25 trillion of agency MBS purchases, after acquiring $139.1 billion (net) of agency MBS over the course of the first quarter. Subsequent to the Federal Reserve’s exit from the agency MBS market in March, there has been little indication that the mortgage market has been greatly affected by the Federal Reserve’s absence. This can be demonstrated by looking at the spread between the FNMA, 30-year, fixed-rate current coupon mortgage and the yield on

Exhibit 2

![LIBOR/Swap Rates Graph]

Exhibit 3

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<tr>
<th>Coupon (%)</th>
<th>WAC (%)</th>
<th>WAM (Months)</th>
<th>Price</th>
<th>10yr Avg CPR (%)</th>
<th>1yr Avg CPR (%)</th>
<th>Yield (%)</th>
<th>WAL (Years)</th>
<th>Z-Spread (BP)</th>
<th>OAS (BP)</th>
<th>Option Cost (BP)</th>
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the ten-year Treasury note. The spread was 67 basis points at the end of the first quarter compared to 71 basis points at the end of the fourth quarter of 2009. Although the spread has widened since first quarter-end, it remains below the levels observed prior to the financial crisis. For example, the three-year average spread for the years of 2004, 2005 and 2006 was 110 basis points. Any rise in mortgage rates should be evaluated relative to broader interest rate increases, in assessing the health of the mortgage market.

As shown in Exhibit 3, the prices of FNMA TBA MBS increased in the first quarter. For example, the price of a FNMA 5% coupon TBA MBS increased from $102.69 in December to $103.16 in March. Accordingly, mortgage rates decreased from the previous quarter, as the FNMA 60-day commitment rate for a 30-year fixed-rate mortgage declined by 7 basis points, falling to 4.90%. Although the commitment rate briefly rose above 5% at the beginning of the second quarter of 2010, it has since fallen to 4.19% as of second quarter-end.

The thrift industry has marginally decreased its holdings of all fixed-rate mortgage loans since the first quarter of 2009. In the first quarter of 2010, the median percentage ratio of all fixed-rate mortgage loans to total assets was 40.6% compared to 42.0% in the first quarter of 2009. Similarly, the median percentage ratio of all adjustable-rate mortgage loans to total assets decreased to 22.3% in the first quarter of 2010, falling from 24.6% in the first quarter of 2009. The median percentage ratio of 30-year, single-family, fixed-rate mortgage loans and securities to total assets also decreased slightly to 8.9% in the first quarter of 2010, down from 9.0% in the first quarter of 2009. Consistent with prevailing interest rates, the weighted average coupon for 30-year, fixed-rate, single family mortgages decreased to 5.94% in March, down from 6.09% in December.

On the liability side of the balance sheet, the thrift industry has been moving towards using a larger percentage of non-maturity deposits to fund its assets. The median percentage ratio of non-maturity deposits to total assets increased to 32.0% in the first quarter of 2010, up from 28.6% in the first quarter of 2009. Non-maturity deposits represent a stable source of funding that reduces an institution’s sensitivity to rising interest rates. The intangible value associated with these deposits is derived from an institution’s customer relationship and its ability to change offered rates with a lag relative to market rate increases. Accordingly, it is important for an institution to fully understand its customers’ core deposit behavior. Without accurately identifying the retention rates associated with deposit balances, or recognizing the customer behavior profile that is unique to each institution, thrifts run the risk of experiencing higher sensitivity levels in a rising interest rate envi-
The median percentage ratio of deposit intangibles to total assets, as measured by the OTS NPV Model, increased to 12.6% in the first quarter of 2010, up from 11.1% in the first quarter of 2009. It should be noted that the OTS NPV Model provides only an approximate valuation of an institution’s deposit intangible value.

**First Quarter NPV Model Results and the Thrift Industry’s IRR Profile**

Pre-shock and post-shock NPV ratios improved in the first quarter. The thrift industry’s median pre-shock NPV ratio increased to 13.41% in March, up from 13.22% in December. Similarly, the industry’s median post-shock NPV ratio increased to 12.06% in March, up from 11.92% in December. The industry’s median sensitivity measure decreased to 106 basis points in March, down from 111 basis points in December.

The industry’s median effective duration of total assets decreased to 1.55 in the first quarter, falling from 1.61 in the fourth quarter of 2009. At the same time, the industry’s median effective duration of total liabilities increased to 1.38 in the first quarter, rising from 1.36 in the fourth quarter. Taken together, these changes narrowed the industry’s effective duration gap and contributed to lower overall sensitivity measures.

Also contributing to lower sensitivity measures and higher post-shock NPV ratios were lower effective durations for single-family, fixed-rate assets. The median effective duration of 30-year, fixed-rate, single-family mortgage loans decreased to 3.28 in March, down from 3.33 in December.

The thrift industry’s interest rate risk profile improved in the first quarter. From a supervisory perspective, the number of institutions with a “High” or “Significant” risk, as defined by Thrift Bulletin 13a, decreased to 16 in March from 24 in December. The number of institutions with a sensitivity measure over 200 basis points decreased to 196 in March, down from 227 in December.
Appendix A — All Thrifts

Sensitivity Measure Distribution
All Thrifts

Pre-Shock NPV Ratio Distribution
All Thrifts

Post-Shock NPV Distribution
All Thrifts

Asset Duration Distribution
All Thrifts

Liabilities Duration Distribution
All Thrifts

Descriptive Statistics
Median = 106
Mean = 146
Standard Deviation = 122
Skewness = 1.07
Kurtosis = 0.8
Maximum = 669.468
Minimum = 0
Count = 717

Descriptive Statistics
Median = 13.41
Mean = 15.62
Standard Deviation = 9.53
Skewness = 5.03
Kurtosis = 1.8
Maximum = 91.801
Minimum = -0.389
Count = 717

Descriptive Statistics
Median = 12.06
Mean = 14.17
Standard Deviation = 9.56
Skewness = 5.18
Kurtosis = 34.18
Maximum = 91.377
Minimum = -2.052
Count = 717

Descriptive Statistics
Median = 1.55
Mean = 1.62
Standard Deviation = 0.74
Skewness = 0.12
Kurtosis = 0.79
Maximum = 4.422
Minimum = -2.293
Count = 717

Descriptive Statistics
Median = 1.38
Mean = 1.39
Standard Deviation = 0.41
Skewness = 0.59
Kurtosis = 4.86
Maximum = 4.428
Minimum = 0
Count = 717
Appendix B — Northeast Region

### Sensitivity Measure Distribution

**Northeast**

- **Percent of Thrifts**
- **Descriptive Statistics**
  - Median = 186
  - Mean = 202
  - Standard Deviation = 122
  - Skewness = 0.36
  - Kurtosis = -0.98
  - Maximum = 484.406
  - Minimum = 5.867
  - Count = 160

### Pre-Shock NPV Ratio Distribution

- **Northeast**
- **Percent of Thrifts**
- **Descriptive Statistics**
  - Median = 13.32
  - Mean = 14.73
  - Standard Deviation = 5.27
  - Skewness = 2.16
  - Kurtosis = 7.6
  - Maximum = 45.49
  - Minimum = 7.361
  - Count = 160

### Post-Shock NPV Distribution

- **Northeast**
- **Percent of Thrifts**
- **Descriptive Statistics**
  - Median = 11.01
  - Mean = 12.72
  - Standard Deviation = 5.3
  - Skewness = 1.9
  - Kurtosis = 5.56
  - Maximum = 41.43
  - Minimum = 4.238
  - Count = 160

### Asset Duration Distribution

- **Northeast**
- **Percent of Thrifts**
- **Descriptive Statistics**
  - Median = 2.03
  - Mean = 1.97
  - Standard Deviation = 0.74
  - Skewness = -0.37
  - Kurtosis = 0.21
  - Maximum = 3.73
  - Minimum = -0.396
  - Count = 160

### Liabilities Duration Distribution

- **Northeast**
- **Percent of Thrifts**
- **Descriptive Statistics**
  - Median = 1.46
  - Mean = 1.52
  - Standard Deviation = 0.43
  - Skewness = 2.17
  - Kurtosis = 12.64
  - Maximum = 4.428
  - Minimum = 0.472
  - Count = 160
Appendix C — Southeast Region

### Sensitivity Measure Distribution

**Descriptive Statistics**
- Median = 87
- Mean = 125
- Standard Deviation = 120
- Skewness = 1.5
- Kurtosis = 2.2
- Maximum = 584.657
- Minimum = 0
- Count = 168

### Pre-Shock NPV Ratio Distribution

**Descriptive Statistics**
- Median = 13.41
- Mean = 15.65
- Standard Deviation = 9.47
- Skewness = 4.44
- Kurtosis = 28.57
- Maximum = 84.105
- Minimum = -0.389
- Count = 168

### Post-Shock NPV Distribution

**Descriptive Statistics**
- Median = 12.46
- Mean = 14.4
- Standard Deviation = 9.46
- Skewness = 4.61
- Kurtosis = 30.08
- Maximum = 83.838
- Minimum = -2.052
- Count = 168

### Asset Duration Distribution

**Descriptive Statistics**
- Median = 1.37
- Mean = 1.46
- Standard Deviation = 0.68
- Skewness = 0.67
- Kurtosis = 0.23
- Maximum = 3.68
- Minimum = 0.224
- Count = 168

### Liabilities Duration Distribution

**Descriptive Statistics**
- Median = 1.25
- Mean = 1.25
- Standard Deviation = 0.38
- Skewness = 0.33
- Kurtosis = 1.33
- Maximum = 2.793
- Minimum = 0.061
- Count = 168
Appendix D — Central Region

### Sensitivity Measure Distribution

**Central**

Descriptive Statistics
- Median = 91
- Mean = 134
- Standard Deviation = 117
- Skewness = 1.42
- Kurtosis = 2.08
- Maximum = 659.468
- Minimum = 0
- Count = 235

### Pre-Shock NPV Ratio Distribution

Descriptive Statistics
- Median = 13.15
- Mean = 15.32
- Standard Deviation = 9.6
- Skewness = 5.6
- Kurtosis = 38.98
- Maximum = 91.801
- Minimum = 3.735
- Count = 235

### Post-Shock NPV Distribution

Descriptive Statistics
- Median = 11.9
- Mean = 13.98
- Standard Deviation = 9.6
- Skewness = 5.78
- Kurtosis = 40.89
- Maximum = 91.377
- Minimum = 2.713
- Count = 235

### Asset Duration Distribution

Descriptive Statistics
- Median = 1.5
- Mean = 1.58
- Standard Deviation = 0.69
- Skewness = 0.48
- Kurtosis = 0.75
- Maximum = 4.422
- Minimum = -0.248
- Count = 235

### Liabilities Duration Distribution

Descriptive Statistics
- Median = 1.43
- Mean = 1.42
- Standard Deviation = 0.37
- Skewness = -0.03
- Kurtosis = 1.78
- Maximum = 2.943
- Minimum = 0
- Count = 235
Appendix F — Western Region

Sensitivity Measure Distribution
Western

Descriptive Statistics
Median = 83
Mean = 127
Standard Deviation = 114
Skewness = 1.21
Kurtosis = 0.86
Maximum = 522.28
Minimum = 0
Count = 154

Pre-Shock NPV Ratio Distribution
Western

Descriptive Statistics
Median = 13.62
Mean = 16.97
Standard Deviation = 12.43
Skewness = 4.22
Kurtosis = 19.79
Maximum = 86.356
Minimum = 4.738
Count = 154

Post-Shock NPV Distribution
Western

Descriptive Statistics
Median = 12.67
Mean = 15.7
Standard Deviation = 12.46
Skewness = 4.34
Kurtosis = 20.66
Maximum = 85.706
Minimum = 3.574
Count = 154

Asset Duration Distribution
Western

Descriptive Statistics
Median = 1.35
Mean = 1.47
Standard Deviation = 0.75
Skewness = -0.43
Kurtosis = 3.24
Maximum = 3.278
Minimum = -2.293
Count = 154

Liabilities Duration Distribution
Western

Descriptive Statistics
Median = 1.36
Mean = 1.35
Standard Deviation = 0.43
Skewness = -0.23
Kurtosis = 0.84
Maximum = 2.615
Minimum = 0.029
Count = 154