

## Interest Rate Risk Measures

### Office of Thrift Supervision

#### Risk Modeling and Analysis Division

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**Second Quarter 2007**



The attached tables present the final industry statistics for several measures of interest rate risk (IRR): the Pre-Shock Net Portfolio Value (NPV) Ratio, the Interest Rate Sensitivity Measure, the Post-Shock NPV Ratio, and the Change in NPV Ratio. These measures are defined in footnotes found in the tables. These tables can be used to assess an institution's level of IRR relative to the industry.

For example, an institution can find its approximate Pre-Shock NPV Ratio ranking by referring to TABLE 1 on the following page. Assume XYZ Savings has a Pre-Shock NPV Ratio of 18%. In the last column of the table, locate the first value that is larger than XYZ's Pre-Shock NPV Ratio. For XYZ Savings, this corresponds to the ninth row of the table.

The first column of the ninth row present XYZ's overall Pre-Shock ranking: XYZ's Pre-Shock NPV Ratio places this institution in the fourth quintile of the industry. The second column shows an institution's rank with greater precision. XYZ's Pre-Shock NPV Ratio is better than approximately 80 percent of the industry for the current quarter.

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The Preliminary Interest Rate Risk Measures report for the September, 2007 cycle will be available on the OTS Web page at <http://www.ots.treas.gov/StatisticalReleases> by November 23, 2007.

Interest Rate Risk Measures

**TABLE 1: Pre-Shock NPV Ratio\* as of 06/30/2007**

Quintile	Percent of Industry	*Pre-Shock NPV Ratio
1st	10	9.7
	15	10.2
	20	10.7
2nd	30	11.5
	40	12.3
3rd	50	13.3
	60	14.7
4th	70	16.6
	80	18.7
5th	85	20.8
	90	22.9

\* The Pre-Shock NPV Ratio is defined as the base-case (pre-shock) NPV divided by the present value of assets in the base-case.

**TABLE 2: Interest Rate Sensitivity Measure\* as of 06/30/2007**

Quintile	Percent of Industry	*Sensitivity Measure
1st	10	374
	15	350
	20	318
2nd	30	272
	40	234
3rd	50	200
	60	158
4th	70	123
	80	88
5th	85	71
	90	51

\* The Interest Rate Sensitivity Measure is defined as the decline (in basis points) in the NPV ratio caused by a +200 bp increase or -200 bp decrease in rates, whichever produces the larger decline.

**TABLE 3: Post-Shock NPV Ratio\* as of 06/30/2007**

Quintile	Percent of Industry	*Post-Shock NPV Ratio
1st	10	7.2
	15	7.8
	20	8.3
2nd	30	9.5
	40	10.4
3rd	50	11.4
	60	12.8
4th	70	14.5
	80	16.8
5th	85	18.9
	90	20.6

\* The Post-Shock NPV Ratio is defined as the Net Portfolio Value (NPV) ratio after a +200 bp increase or -200 bp decrease in rates, whichever produces the smaller ratio.

**TABLE 4: NPV Ratio\* by Interest Rate Scenario as of 06/30/2007**

Quintile	Percent of Industry	*NPV Ratio	
		-200 bp	+200 bp
1st	10	10.1	7.2
	15	11.0	7.9
	20	11.6	8.3
2nd	30	12.4	9.5
	40	13.0	10.5
3rd	50	14.2	11.5
	60	15.6	12.9
4th	70	17.6	14.5
	80	20.4	16.8
5th	85	21.6	18.9
	90	24.7	21.0

\* The NPV ratio for any interest rate scenario is defined as the NPV in that rate scenario divided by the present value of assets in the same rate scenario.

**TABLE 5: Change in NPV Ratio\* by Interest Rate as of 06/30/2007**

Quintile	Percent of Industry	*Change in NPV Ratio	
		-200 bp	+200 bp
1st	10	-38	-378
	15	-12	-351
	20	7	-322
2nd	30	37	-277
	40	59	-240
3rd	50	86	-200
	60	108	-160
4th	70	139	-123
	80	169	-79
5th	85	187	-54
	90	215	-33

\* The Change in NPV ratio is defined as the change (in basis points) in the NPV ratio caused by an interest rate shock of either -200 bp or +200 bp.

Note: The NPV ratio for any interest rate scenario is defined as the NPV in that rate scenario divided by the present value of assets in the same rate scenario. An institution's NPV is equal to the estimated present value of assets minus the present value of liabilities plus the net present value of off-balance sheet contracts. These results are based on 780 OTS-regulated institutions for which the Jun 2007 Interest Rate Risk Exposure Reports are available.

Prepared by the Capital Markets Division, OTS, Washington, D.C., 09/21/2007.