# THRIFT INDUSTRY Interest Rate Risk Measures

## Office of Thrift Supervision

Risk Modeling and Analysis Division

Release Date: 12/19/2007



For further information, please contact: Scott Ciardi (202) 906-6960

### Risk Modeling and Analysis Division

Scott Ciardi, Director Thomas Wilderman Andrew Carayannis Haranath Chadive

1700 G Street, N.W. Washington, DC 20552

## Third 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.

The Preliminary Interest Rate Risk Measures report for the December, 2007 cycle will be available on the OTS Web page at http://www.ots.treas.gov/StatisticalReleases by February 22, 2008.

## THRIFT INDUSTRY

#### Third Quarter 2007

# **Interest Rate Risk Measures**

Page 2

TABLE 1: Pre-Shock NPV Ratio*as of 9/30/2007			
	Quintile	Percent of Industry	*Pre-Shock NPV Ratio
BEST + WORST	1st	10	9.5
		15	10.1
		20	10.5
	2nd	30	11.4
		40	12.2
	3rd	50	13.3
		60	14.7
	4th	70	16.5
		80	19.2
	5th	85	20.4
ш		90	23.2

\* 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 9/30/2007				
Quintile		Percent of Industry	*Sensitivity Measure	
■ WORST	1st	10	343	
		15	310	
		20	284	
	2nd	30	239	
		40	199	
	3rd	50	166	
		60	127	
+	4th	70	108	
F		80	76	
EST	5th	85	61	
8		90	50	

\* 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 9/30/2007

Quintile		Percent of Industry	*Post-Shock NPV Ratio
E.	1st	10	7.5
EST + WORST		15	8.0
		20	8.8
	2nd	30	9.7
		40	10.5
	3rd	50	11.5
		60	12.7
	4th	70	14.6
		80	17.1
	5th	85	18.6
8		90	20.8
BEST +		70 80 85	14.6 17.1 18.6

\* 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 9/30/2007				
	Quintile	Industry -200 bp		PV Ratio +200 bp ss Than:
E.	1st	10	9.6	7.5
		15	10.4	8.2
		20	10.9	8.8
	2nd	30	11.9	9.7
		40	12.6	10.8
	3rd	50	13.7	11.6
		60	15.2	13.0
BEST +	4th	70	17.3	14.9
		80	19.6	17.1
	5th	85	21.3	18.8
		90	23.8	21.2

\* 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 9/30/2007

	Quintile	Percent of Industry	-200 bp	NPV Ratio +200 bp Than:
L	1st	10	-76	-351
WORST		15	-44	-318
		20	-27	-291
	2nd	30	1	-239
1		40	27	-199
	3rd	50	47	-161
		60	65	-124
ŧ	4th	70	93	-91
F		80	124	-55
BEST	5th	85	141	-34
Ш		90	173	-7

<sup>\*</sup> 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 773 OTS-regulated institutions for which the Sep 2007 Interest Rate Risk Exposure Reports are available.

Prepared by the Capital Markets Division, OTS, Washington, D.C., 12/19/2007.

**FINAL STATISTICS**