



# Thrift Industry Interest Rate Risk Measures

Fourth Quarter 1999

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# Risk Management Division

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

An institution can find its approximate **Post-Shock NPV Ratio** ranking by referring to Table 1. Assume XYZ Savings has a Post-Shock NPV Ratio of 4.8%. In the last column of the table, locate the first value that is larger than XYZ's postshock ratio. For XYZ Savings, this corresponds to the second row of the table.

The first column of this row contains XYZ's overall ranking: XYZ's post-shock ratio places this institution in the first

quintile (the worst 20%) of the industry. The second column shows an institution's rank with greater precision. XYZ's post-shock ratio is actually among the bottom (worst) 15% of the industry.

This issue of the *Interest Rate Risk Measures* is available on the OTS Web page at http://www.ots.treas.gov/docs/16940.pdf. The preliminary measures for March will be available on the OTS Web page by May 21, 2000 (at http://www.ots.treas.gov/docs/16011.pdf).

Note: The IRR Measures are no longer available on the OTS PubliFax system. All documents previously available on PubliFax will be provided through the OTS Web site. We will continue to use the PubliFax document numbering convention. If you have any questions or comments, please call the Dissemination Branch at (202) 906-5900, or e-mail them at public.info@ots.treas.gov.

Quintile	Percent of	Post-Shock
	Industry	NPV Ratio
		Less Than:
1st	10	4.3 %
	15	5.0
	20	5.5
2nd	30	6.7
	40	7.7
3rd	50	8.7
	60	9.7
4th	70	11.0
	80	12.7
5th	85	14.4
	90	16.7

## Table 1 Post-Shock NPV Ratio\* As of December 31, 1999

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

As of December 31, 1999				
Quintile	Percent of Industry	Sensitivity Measure Greater Than:		
1st	10	418 bp		
	15	379		
	20	349		
2nd	30	308		
	40	268		
3rd	50	231		
	60	194		
4th	70	156		
	80	115		
5th	85	91		
	90	67		

# Table 2Interest Rate Sensitivity Measure\*As of December 31, 1999

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

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.

Based on 1,015 OTS-regulated institutions for which the December 1999 Interest Rate Risk Exposure Reports are available.

Prepared by the Risk Management Division, OTS, Washington, D.C., March 31, 2000.

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## Table 3 Pre-Shock NPV Ratio\* As of December 31, 1999

Quintile	Percent of Industry	Pre-Shock NPV Ratio Less Than:
1st	10 15 20	7.3 % 7.8 8.2
2nd	30 40	9.1 10.0
3rd	50 60	10.8 11.8
4th	70 80	13.0 14.9
5th	85 90	16.7 18.8

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

Quintile	Percent of	NPV Ratio*	
	Industry	-200bp	+200bp
		Less Than:	
1st	10	8.4 %	4.3 %
	15	8.9	5.0
	20	9.3	5.5
2nd	30	10.1	6.7
	40	11.0	7.7
3rd	50	11.8	8.7
	60	12.9	9.9
4th	70	14.1	11.1
	80	16.4	12.9
5th	85	17.8	14.7
	90	20.3	16.8

#### Table 4 NPV Ratio by Interest Rate Scenario\* As of December 31, 1999

\* 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.

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.

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Quintile	Percent of	Change in NPV Ratio*	
	Industry	-200bp	+200bp
		Less Than:	
1st	10	-24 bp	-417 bp
	15	-1	-378
	20	16	-349
2nd	30	54	-306
	40	82	-267
3rd	50	109	-229
	60	140	-192
4th	70	168	-151
	80	201	-101
5th	85	223	-70
	90	255	-38

## Table 5 Change in NPV Ratio by Interest Rate Scenario\* As of December 31, 1999

\* 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 or +200 basis points.

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.

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