

# Thrift Industry Interest Rate Risk Measures

First 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 6.7%. 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://ots.treas.gov/docs/16910.pdf. The preliminary measures for June will be available on the OTS Web page by August 21, 1999 (at http://ots.treas.gov/docs/16921.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	6.1 %
	15	6.9
	20	7.4
2nd	30	8.2
	40	9.0
3rd	50	10.0
	60	10.9
4th	70	12.1
	80	14.3
5th	85	15.5
	90	17.4

#### Table 1 Post-Shock NPV Ratio\* As of March 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.

Quintile	Percent of	Sensitivity		
	Industry	Measure		
		Greater Than:		
1st	10	311 bp		
	15	282		
	20	253		
2nd	30	212		
	40	176		
3rd	50	144		
	60	114		
4th	70	84		
	80	58		
5th	85	43		
	90	27		

#### Table 2 Interest Rate Sensitivity Measure\* As of March 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 1,034 OTS-regulated institutions for which the March 1999 Interest Rate Risk Exposure Reports are available.

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

Quintile	Percent of Industry	Pre-Shock NPV Ratio Less Than:	
1st	10 15 20	8.0 % 8.4 8.8	
2nd	30 40	9.6 10.6	
3rd	50 60	11.3 12.4	
4th	70 80	13.8 15.8	
5th	85 90	17.2 19.2	

\* 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	8.2 %	6.3 %
	15	8.8	7.0
	20	9.3	7.7
2nd	30	10.2	8.5
	40	11.1	9.4
3rd	50	12.2	10.2
	60	13.4	11.2
4th	70	14.8	12.4
	80	16.9	14.6
5th	85	18.3	16.1
	90	20.2	17.8

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

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Quintile	Percent of	Change in NPV Ratio*	
	Industry	-200bp	+200bp
		Less Than:	
1st	10	-63 bp	-306 bp
	15	-28	-280
	20	-13	-247
2nd	30	22	-206
	40	46	-171
3rd	50	74	-132
	60	100	-97
4th	70	126	-60
	80	161	-18
5th	85	183	7
	90	213	42

\* 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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