Non-Maturity Deposit Risk Model

Version 1.1

The purpose of the model is to examine how the protracted low-rate environment influenced the bank's deposit funding composition in the past and to estimate the impact of a potential future shift in funding mix on the bank's earnings.

Input Data & Review Report

User Guide

Bank Name	Sample Community Bank

Total Assets ($000)	$50,000
Projected 12-Month Net Income ($000)	$625

ANALYSIS OF HISTORICAL DEPOSIT COMPOSITION TRENDS

	Recent Data (End Period)		Historical Data (Start Period)		2014 Deposits Based on 2007 Mix Simulation	Potential Deposit Shift Simulation
Analysis Period						
Year	**2014**		**2007**			
Quarter End	**June**		**June**			
	Actual $000		Actual $000		'$000	'$000
NON-MATURITY DEPOSITS	**$58,625**	**64.6%**	**$33,560**	**46.6%**	**$42,311**	**-$16,314**
Demand Deposits	$33,500	36.9%	$14,500	20.2%		
NOW and ATS Accounts	$10,900	12.0%	$11,900	16.5%		
Money Market Deposit Accounts	$7,225	8.0%	$2,250	3.1%		
Other Savings Accounts	$7,000	7.7%	$4,910	6.8%		
TIME DEPOSITS	**$32,100**	**35.4%**	**$38,400**	**53.4%**	**$48,414**	**$16,314**
Time Deposits At or Below Insurance Limit	$27,200	30.0%	$20,850	29.0%		
Time Deposits Above Insurance Limit	$4,900	5.4%	$17,550	24.4%		
TOTAL DEPOSITS	**$90,725**	100.0%	**$71,960**	100.0%	**$90,725**	**$0**

IMPACT OF POTENTIAL DEPOSIT SHIFT IN THE FUTURE

Potential Loss in Non-Maturity Deposits	**Simulation**
Volume $000	**$16,314**
% of Non-Maturity Deposits	27.8%
% of Assets	32.6%

Length of Projected Deposit Shift Period	**6**	**Year(s)**
Potential Additional Funding Costs (%)	**2.00%**	Estimate
Income Tax Rate (%)	34.00%	Estimate
Potential Additional Funding Costs - Net of Tax	1.32%	Estimate

Projection Period	Potential Loss in Non-Maturity Deposits	Potential Additional Funding Costs	Funding Costs % of Proj. 12-Month Net Income
Year 1	$2,719	**$36**	5.7%
Year 2	$5,438	**$72**	11.5%
Year 3	$8,157	**$108**	17.2%
Year 4	$10,876	**$144**	23.0%
Year 5	$13,595	**$179**	28.7%
Year 6	$16,314	**$215**	34.5%
Year 7	$16,314	**$215**	34.5%
Year 8	$16,314	**$215**	34.5%
Year 9	$16,314	**$215**	34.5%
Year 10	$16,314	**$215**	34.5%

Non-Maturity Deposit Risk Model - USER GUIDE

Significant surge in deposits since the financial crisis has pushed reliance on deposit funding to record-high levels, while the deposit mix has shifted toward non-interest and other non-maturity deposit balances. Traditionally stable deposit categories are expected to show higher volatility and rate sensitivity in the anticipated rising rate environment. The to Non-Maturity Deposit Risk Model is designed to assist in determining how the interest expense and earnings would change if deposit balances shift toward higher-rate products, or deposit balances leave the bank altogether and need to be replaced by alternative funding sources.

The analysis is performed in two steps:

1. Analysis of Historical Deposit Composition Trends

Using the historical and the current balances for the key deposit account categories, the model recalculates the deposit mix by applying the historical deposit composition percentages to the current balances. The potential deposit shift is calculated as a difference between the current non-maturity deposit balances and the simulated balances based on the historical composition. The following inputs are required:

* **Historical and current balances for the key deposit account categories:** The inputs are in thousands of dollars and can be based on your UBPR report, Call report, or general ledger totals.

* **Beginning and end year for the analysis period:** Considering the beginning of the shift in the historical deposit trends, most banks will find their historical balances from 2007 or early 2008 to be an adequate basis for the comparison. Most recent reporting period may be used as an end period for the analysis.

2. Estimated Impact of Potential Deposit Shift in Future

This section of the model allows you to estimate the potential additional funding costs associated with the simulated deposit shift in the future. The following inputs are required:

* **Estimated total potential loss in non-maturity deposits**: This can be based on the outcome of the analysis of historical deposit composition trends or an alternative scenario estimate. If no input is provided by the user, the historical deposit composition trends will be used as a basis.

* **Length of Projected Period Shift**: The number of years used for the calculation of the projected annual loss in non-maturity deposits. Consideration should be given to the fact that the future shift back toward higher-rate deposits may occur more rapidly than the historical shift toward non-maturity deposits.

* **Potential Additional Funding Costs**: Estimated increase in funding costs resulting from the projected shift toward higher-rate funding alternatives. The additional funding costs should represent the difference in the projected non-maturity deposit account rate and the CD rate after a rise in interest rates. *For example, if rates increase by 2%, you might expect an increase in the CD rate of 1.75% and an increase in the non-maturity deposit rate of 0.75%. If this were the case and if the current rate differential is 0.50%, then the new differential would be 1.50% (1.75% - 0.75% + 0.50%). A higher rate change would generate a larger differential, while a lower rate change would generate a smaller differential.*

* **Income Tax Rate Estimate**: The projected federal and state tax rate used to calculate the potential additional funding costs net of tax impact.