



Bankers **GPS**
by Plansmith

The thinking banker's guide to the future

Especially Prepared For :

Strategy Bank

Schaumburg, IL

From information reported by the bank in the Jun 2025 Call Report

The calculations and methodologies contained in this model have been certified valid
for the measurement of bank interest rate risk

by TCG Risk Analytics
Pittsburgh, PA

Copyright 2011 by Plansmith Corporation

Risk

Table of Contents

Subject	Page
Introduction	1
Executive Summary	2
The calculation results are brought into summary form	
Current and Historical Financial Data	3
Balance Sheets, Income Statements and Mix Analysis	
Bank's Performance History Charts	8
Charts showing key ratios over the past five years	
What to Expect in the Following Pages	10
An outline of what is to come	
Risk Tolerance Analysis	11
Calculation of the bank's Minimum Net Interest Margin and Risk Tolerance	
Factors Impacting Risk Tolerance	12
Shows how much each item would have to change to bring Risk Tolerance to zero	
Analysis of Non - Maturing Balance Sheet Categories	13
Calculates the relationship between rate change and Non-Maturing deposit pricing	
The Rate Sensitivity Gap	14
The Rate Sensitivity Gap analysis under current rate conditions	
Rate Shock Interest Margin Simulation	15
Net Interest Income Risk using simulation under varying rate levels over 1 year	15 a
Net Interest Income Risk using simulation under varying rate levels over 2 years	15 b
Yield Curve Risk Assessment	17
Rate Shocked Economic Value of Equity	18
A computation of the impact of rate shocks on the bank's equity	
Risk Strategy Bubbles	19
A graphic presentation of rate risk useful as a strategy development tool	
Performance Projection	20
Projection of the bank's performance over the next four quarters	
Assumptions	21
Loan Cash Flow	23
Back-Testing	26
Glossary of Terms	27

Introduction

The purpose of this analysis is to provide community bankers with an economical tool with which to determine rate risk and prepare for IRR examinations. It combines up to 20 quarters of the bank's financial history from call reports with required rate risk measurement techniques to produce an estimate of both interest margin and equity risks. With these reports, the user can easily understand, communicate and prepare for the impact of rate changes with minimal costs, staff and time.

Risk Analysis Methods

The system provides several methods for measuring interest rate risk. Risk to the net interest margin is measured using the Rate Sensitivity Gap Analysis to show cash flow and repricing information, and then margin simulation to quantify the actual income risk. While net interest margin risk is a short-term (12 month) measure, longer term risks to the bank's performance can be seen by computing Economic Value of the bank's Equity (EVE). The EVE is actually the present value at various interest levels and is gaining popularity as a required component in complete rate risk examination.

Plansmith's Risk Tolerance

Risk is always present in the balance sheet; however, the severity of risk has meaning only when placed in context. In order to understand the severity of the present, we must understand the bank's ability to absorb losses, its Rate Risk Tolerance. Plansmith's Risk Tolerance Analysis is the benchmark against which risk can be determined to be acceptable or excessive. Risk Tolerance also provides insights into the components of performance that can reduce pressure on the net interest margin when few alternatives exist. This unique analysis aids understanding by bringing a new dimension to the interest rate risk equation.

Rate Risk Strategy Development

The report provides traditional risk measurements along with a new technique to help control rate risk called Asset-Liability Strategy Bubbles. In one chart, all of the components of risk are brought together visually to depict the risk to both net interest margin and EVE, as well as the underlying causes. This view allows the reader to quickly and easily comprehend the scope of the problem, as well as the solution with its Risk/Reward trade-off.

The Data Source

The analyses are developed using the bank's Call Report history as taken from the FDIC database as well as some external data. The system examines data covering up to 20 quarters within the context of a full rate cycle giving greater validity to the results. Call Report data provides several benefits: 1) no additional staff time is required to prepare and load data, 2) historical performance statistics with which to discern the bank's behavioral characteristics. 3) The ability to test the model accuracy against known historical results, or backchecking.

Understanding and Communicating Risk

Rate risk analysis can be complex, and often the real challenge lies in the explanation of risk to boards, staff and examiners. Systems that present several pages of detailed schedules obscure the issues rather than clarify them and inhibit strategy development. To overcome these problems, this report reduces the analyses to easily read charts and graphs supported by explanations. Our goal is to improve both understanding and communication of the risks and the strategies for dealing with those risks. Understanding and communicating risk is at the heart of the concerns of the banking regulators.

A Word About Accuracy

Finally, the reader should recognize that while the data used in the analyses are limited to the Call Report detail, the results are within an acceptable range of accuracy for an uncomplicated community bank. Risk measurement itself is an imprecise science where all results are estimates at best. RiskGPS provides a reasonable assessment of interest rate risk with a minimal investment of both time and expense. We say that it is the 90/10 rule, that is, it provides 90% of the answers with only 10% of the effort and cost. If due to the complexity of the balance sheet, the bank requires a more detailed analysis, Plansmith's Financial Compass system provides additional capacity and capability. It is a complete bank simulator that provides greater granularity with more detailed assumptions to deal with complex instruments. **Financial Compass** is an instrument-level analysis system that pulls its data from the bank's accounting systems on monthly basis. To learn more about Plansmith's complete range of products and services, call Plansmith at 800-323-3281.

Executive Summary

Bank's Statistics from the Jun 2025 Call Report

	Quarter		Quarter	YTD
Asset Size :	838,450	Return on Avg Assets:	1.33%	1.36%
Earning Assets :	785,483	Int. Margin / Earn Assets :	5.18%	5.09%
Tier 1 Equity Capital :	81,724	Loans Loss Prov/ Avg Assets :	0.53%	0.42%
Tier 1 Equity/Assets :	9.75%	Assets growth Rate :	1.67%	4.32%
Net Interest Margin Risk Assessment				

Bank management must ensure that risk is measured over a potential range of interest rate changes including both parallel and nonparallel yield curve shifts. Below is a summary analyses of the risk to the Net Interest Margin and Equity under these conditions:

Rate Sensitivity GAP Data	12 Month Gap			12 Month RSA/RSL		
	172,282			1.56		
	Parallel Yield Curve Rate Shock			Non-Parallel Yield Curve Shock		
	-400bp	Flat	+400bp	ST Rise	Flat	LT Fall
Interest Income	47,833	58,581	68,968	58,581	58,581	53,275
Interest Expense	12,921	17,293	21,906	19,600	17,293	17,293
Net Interest Income	34,913	41,288	47,062	38,981	41,288	35,981
Net Other Expenses	27,960	27,960	27,960	27,960	27,960	27,960
Net Income	6,952	13,327	19,102	11,021	13,327	8,021
Dividends	2,500	2,500	2,500	2,500	2,500	2,500
Adjusted Equity	86,176	92,551	98,326	90,245	92,551	87,245
Adj. Equity Ratio	10.28%	11.04%	11.73%	10.76%	11.04%	10.41%
NIM Percent Change	-15.44%		13.99%	-5.59%		-12.85%

Economic Value of Equity Risk

The Economic Value of Equity is a function of the duration difference between the asset and liabilities. The risk in this case is that rates will FALL and cause the bank's equity value to fall. The rate of change for the equity value is -4% for a 100bp of immediate rate FALL. This change should be compared to the bank's rate risk policy for acceptability. The severity of the potential loss is measured by the Equity Risk Cushion which tells that the bank is in a position to absorb a loss and maintain minimum equity ratio.

Fair Values

	-400bp	-100bp	Flat	+100bp	+400bp
Asset Value	883,632	849,188	838,042	827,081	795,840
Liability Value	779,357	724,964	708,170	692,433	649,593
Economic Value of Equity	104,275	124,224	129,872	134,648	146,247
EVE Ratio	11.80%	14.63%	15.50%	16.28%	18.38%
EVE Percent Change	-19.71%	-4.35%		3.68%	12.61%
Minimum Equity (7%)	61,854	59,443		57,896	55,709
Equity Cushion	42,421	64,781		76,752	90,538

Projected Results

Avg Rate Change	-39bp	Asset Growth Rate	6.30%
NIM (% of Earn Assets)	5.26%	Ending Tier 1 Equity	91,505
Net Overhead (% of Total Assets)	2.60%	Equity Ratio(% of Total Assets)	10.27%
Loan Loss Provision (% of Total Assets)	0.53%		

Projected Return on Assets 1.42 %

Balance Sheet

(000 omitted)

Assets	Jun 2024	Sep 2024	Dec 2024	Mar 2025	Jun 2025
Cash and Nonint Bearing Deposits	17,699	19,876	16,563	18,868	22,463
Interest Bearing Deposits	93,215	109,757	100,309	106,449	88,921
U.S. Treasury Securities	0	0	0	0	0
U.S. Gov't Agencies & Corp Oblig.	967	1,006	967	993	1,001
State and Political Subdivisions	11,007	11,199	12,035	11,764	11,553
Total Mortgage Backed Securities	11,119	10,683	11,275	11,004	10,388
Other Equities and Mutual Funds	0	0	0	0	0
Other Debt Securities	4,063	4,044	4,036	4,036	4,035
Total Securities	27,156	26,932	28,313	27,797	26,977
Fed Funds Sold + Rev Repurch. Agrmts	0	0	0	0	0
Loans Secured by Real Estate	433,983	443,350	446,499	462,034	482,883
Commercial & Industrial Loans	142,150	140,842	140,540	139,839	146,235
Consumer Loans	34,364	32,247	31,490	29,420	28,399
Leases	0	0	0	0	0
All Other Loans	10,721	11,142	11,253	10,736	12,068
Unearned Discount	0	0	0	0	0
Total Loans (net of unearned)	621,218	627,581	629,782	642,029	669,585
Loan Loss Reserve	-8,729	-9,056	-9,134	-9,168	-9,589
Fixed & Other Assets	36,937	37,198	37,909	38,677	40,093
Total Assets	787,496	812,288	803,742	824,652	838,450
Liabilities					
Checking (Non-Interest Bearing)	149,028	148,709	143,826	150,022	150,072
Checking (Interest Bearing)	140,711	144,093	141,327	161,546	169,817
MMDA	5,632	7,751	6,162	5,669	5,627
Savings	90,930	85,779	83,898	83,637	84,393
CDs < \$250K	204,306	215,400	214,603	217,360	218,051
CDs > \$250K	95,167	104,614	106,348	101,323	104,088
Total Deposits	685,774	706,346	696,164	719,557	732,048
Fed Funds Purch + Repurch Agrmts	0	0	0	0	0
Other Borrowed Funds	21,500	21,500	21,500	15,500	15,500
Total Borrowings	21,500	21,500	21,500	15,500	15,500
All Other Liabilities	9,503	10,408	10,373	10,757	10,630
Total Equity Capital	70,719	74,033	75,703	78,839	80,273
Total Liabilities + Equity Capital	787,496	812,288	803,742	824,652	838,450

Selected Average Balances

(000 omitted)

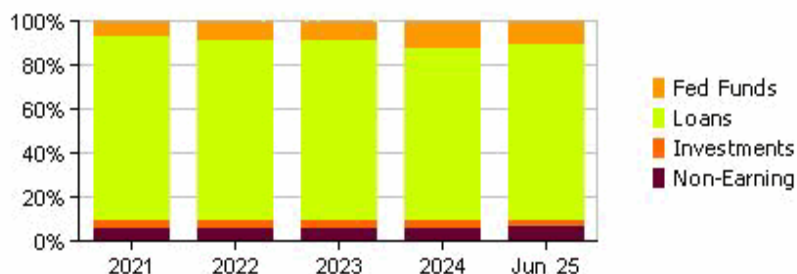
Earning Assets	Jun 2024	Sep 2024	Dec 2024	Mar 2025	Jun 2025
Interest Bearing Deposits in Other Banks	81,064	101,754	112,949	94,412	101,207
Total Securities	29,001	28,388	28,563	29,739	29,243
Fed Funds Sold + Rev Repurch. Agrmts	0	0	0	0	0
Loans Secured by Real Estate	428,798	435,308	441,591	453,834	469,755
Commercial & Industrial Loans	142,054	141,152	139,789	140,348	139,889
Consumer Loans	35,611	34,418	32,715	31,272	29,630
Total Loans (net of unearned)	614,571	620,781	622,159	633,199	647,551
Total Leases	0	0	0	0	0
Earning Assets	724,636	750,923	763,671	757,350	778,001
Interest Bearing Liabilities					
Checking (Interest Bearing)	145,695	147,828	149,774	155,155	171,144
MMDA and Savings	95,167	92,281	90,121	88,831	89,233
CDs < \$250K	193,411	208,919	213,098	216,257	216,159
CDs > \$250K	93,299	103,494	107,471	103,546	103,396
Int. Bearing Deposits in Foreign Offices	0	0	0	0	0
Total Deposits	527,572	552,522	560,464	563,789	579,932
Fed Funds Purch + Repurch Agrmnts	0	0	0	0	0
Other Borrowings	21,500	21,500	21,500	16,108	15,500
Interest Bearing Liabilities	549,072	574,022	581,964	579,897	595,432

26-Aug-2025 10:03

Page 4

Balance Sheet Mix Analysis

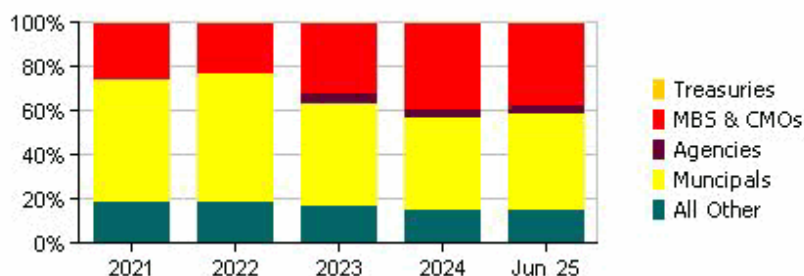
Asset Mix



As on Jun 25

Description	000 omitted
Total Assets	
FFS, Repos & Bnk Dep	88,921
Total Loans (net of unearned)	669,585
Investments	26,977
Non-Earning	52,967
	838,450

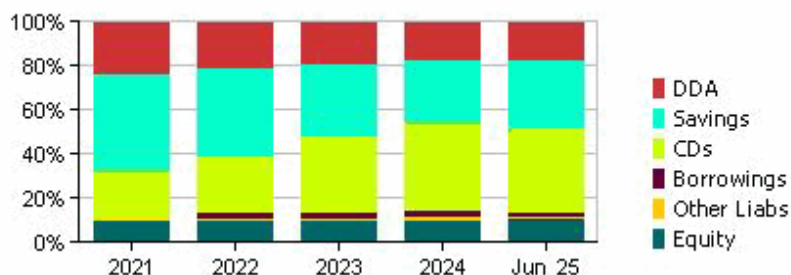
Securities Portfolio Mix



Securities

U.S. Treasuries	0
MBS & CMOs	10,388
U.S. Govt Agencies	1,001
Municipals	11,553
All Other Securities	4,035
	26,977

Liabilities & Equity



Liabilities & Equity

Demand Deposits	150,072
Int Ckg, MMDA, & Sav	259,837
CDs	322,139
Borrowings	15,500
Other Liabilities	10,630
Equity Capital	80,273
	838,451

Income Statement

(000 omitted)

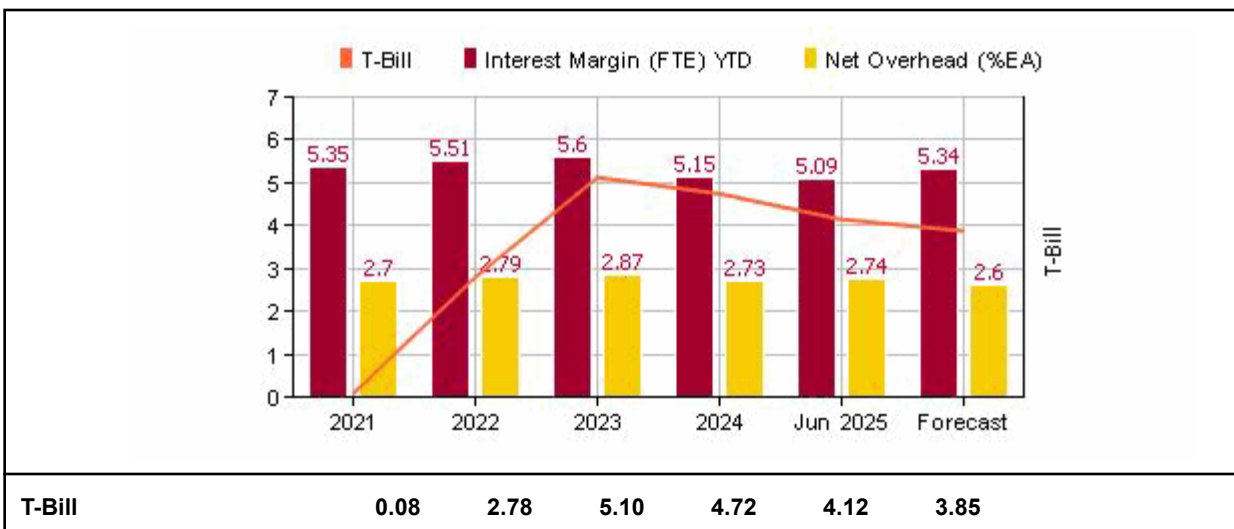
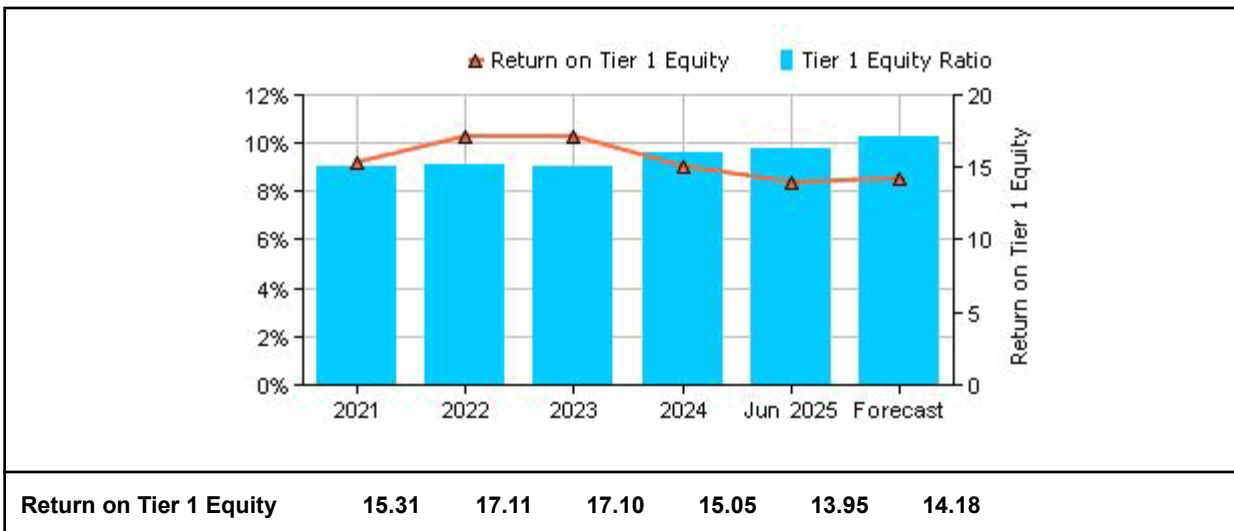
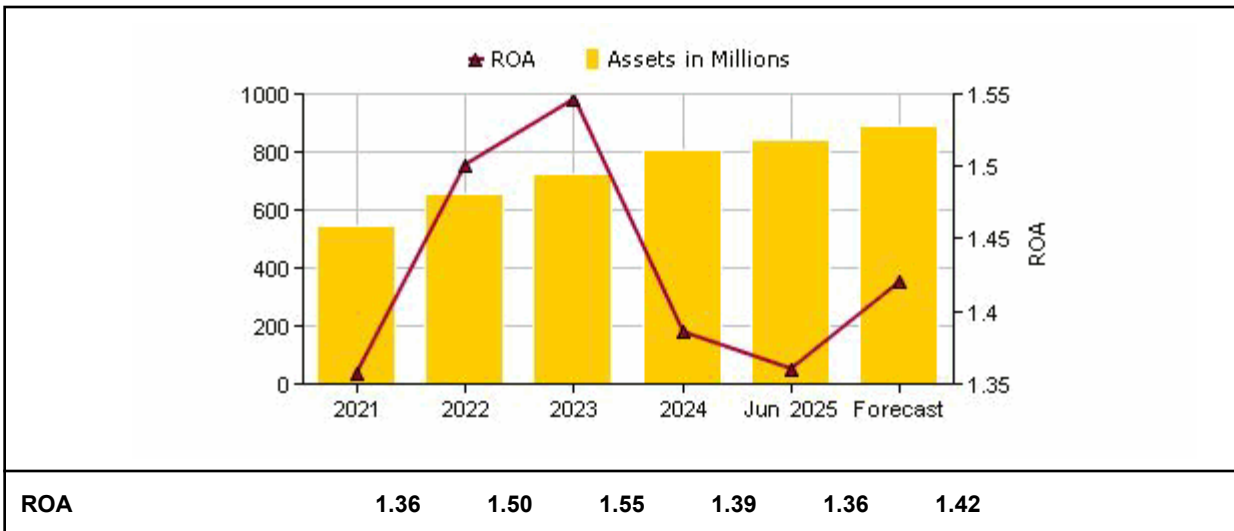
Interest Income	Jun 2024	Sep 2024	Dec 2024	Mar 2025	Jun 2025
Int on Bal due from Dep. Institutions	1,076	1,381	1,340	1,033	1,113
Int on FFS and Reverse Repos	0	0	0	0	0
Inc on Investment Securities	214	203	203	224	220
Int & Fees on Loans	12,161	12,599	12,553	12,481	12,996
Int & Fees on Leases	0	0	0	0	0
Income on Trading Accounts	0	0	0	0	0
Other Interest Income	28	28	28	27	22
Interest Income Total	13,479	14,211	14,124	13,765	14,351
Int Exp on Checking	348	415	426	480	623
Int Exp on MMDA & Savings	63	61	60	58	59
CDs < \$250K	2,221	2,474	2,474	2,341	2,275
CDs > \$250K	1,181	1,359	1,352	1,248	1,163
Total Int Exp on Deposits	3,813	4,309	4,312	4,127	4,120
Int Exp on Borrowed Funds	308	304	274	185	179
Int Expense Total	4,121	4,613	4,586	4,312	4,299
Net Interest Inc before Provision	9,358	9,598	9,538	9,453	10,052
Provision for Loan and Lease Losses	1,232	1,248	522	633	1,095
Net Int Inc After Loan Loss Prov	8,126	8,350	9,016	8,820	8,957
Trust Income	0	0	0	0	0
Service Charges on Deposit Accounts	688	704	743	708	747
Other Non Interest Income	744	922	626	765	826
Non Interest Income Total	1,432	1,626	1,369	1,473	1,573
Salaries and Employee Expenses	3,201	3,349	3,270	3,474	3,438
Premises and Fixed Asset Expenses	687	820	891	838	867
Other Non Interest Expense	2,294	2,381	2,895	2,328	2,612
Non Interest Expense Total	6,182	6,550	7,056	6,640	6,917
Realized Gains(Losses) on Sec Total	0	0	0	0	0
Income Taxes	859	902	574	852	853
Extraordinary Items Net of Tax	0	0	0	0	0
Net Income(Loss)	2,517	2,524	2,755	2,801	2,760

Yields and Costs

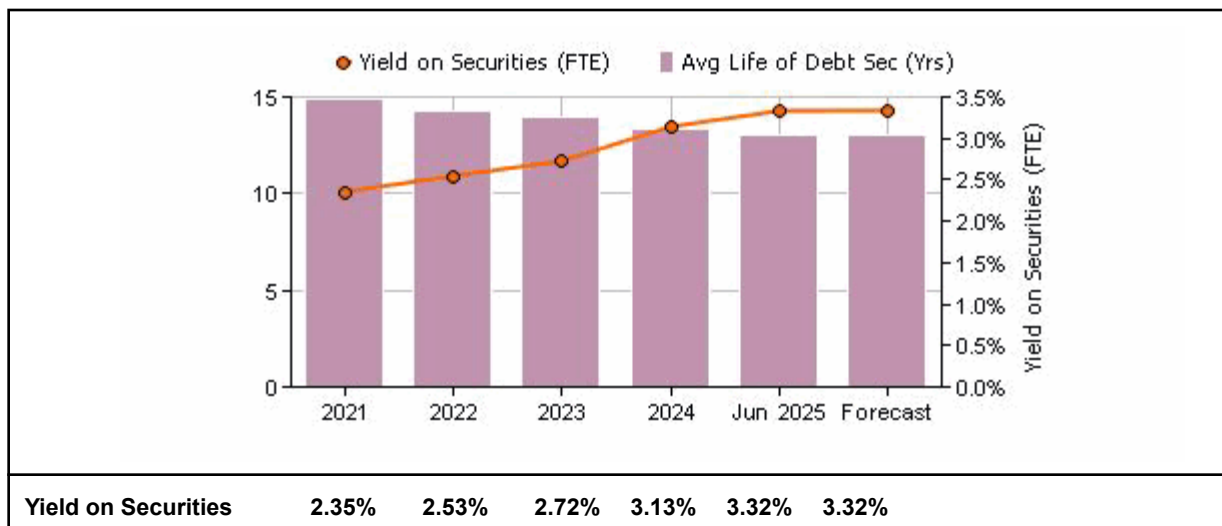
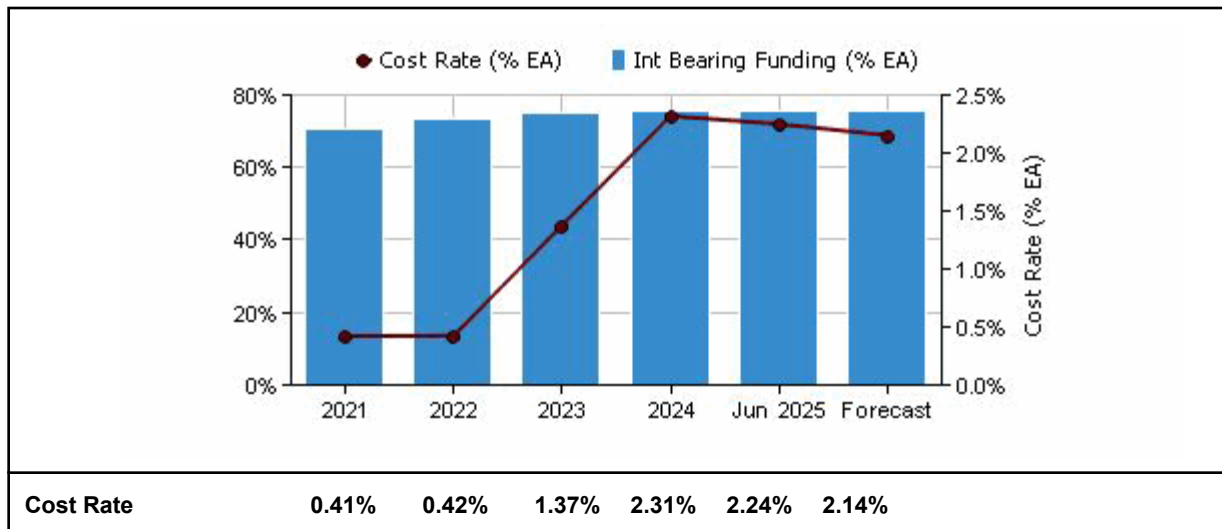
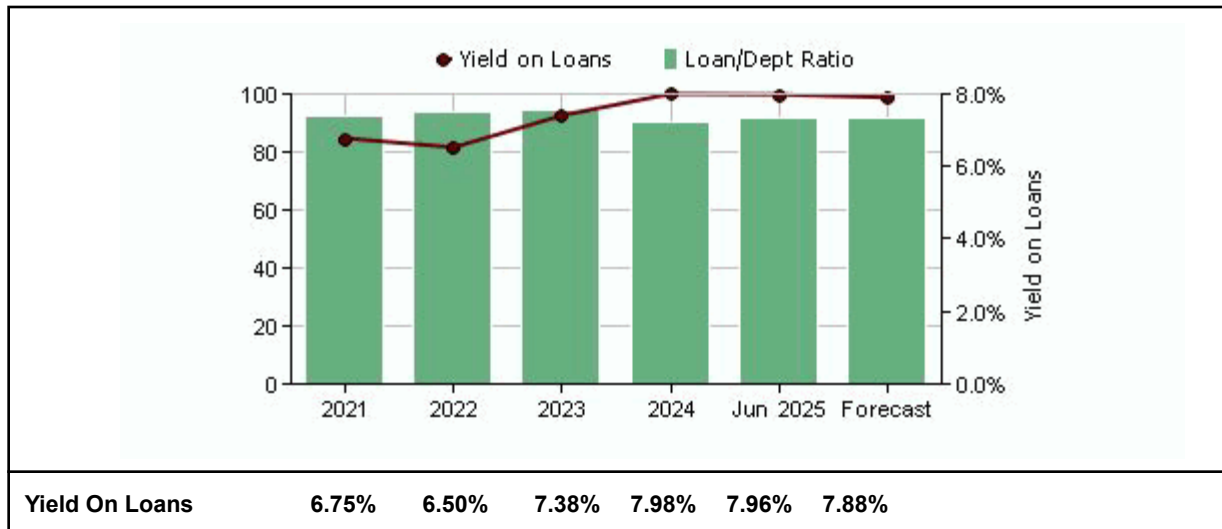
(000 omitted)

Earning Assets	Jun 2024	Sep 2024	Dec 2024	Mar 2025	Jun 2025
Interest Bearing Deposits	5.31	5.43	4.75	4.38	4.40
U.S. Treasury & Agencies	4.74	5.13	5.09	5.05	5.01
Yield on All Securities (FTE)	3.24	3.15	3.11	3.32	3.33
Fed Funds Sold + Rev Repurch. Agrmts	0.00	0.00	0.00	0.00	0.00
Loans Secured by Real Estate	7.15	7.39	7.35	7.24	7.41
Commercial & Industrial Loans	9.37	9.58	9.52	9.26	9.39
Consumer Loans	11.77	12.21	12.07	11.38	11.69
Total Loans (net of unearned)	7.92	8.12	8.07	7.88	8.03
Total Leases	0.00	0.00	0.00	0.00	0.00
Yield on All Earning Assets	7.44	7.57	7.40	7.27	7.38
Interest Bearing Liabilities					
Checking (Int Bearing)	0.96	1.12	1.14	1.24	1.46
MMDA and Savings	0.26	0.26	0.27	0.26	0.26
CDs < \$250K	4.59	4.74	4.64	4.33	4.21
CDs > \$250K	5.06	5.25	5.03	4.82	4.50
Total Deposits	2.89	3.12	3.08	2.93	2.84
Fed Funds Purch + Repurch Agrmnts	0.00	0.00	0.00	0.00	0.00
Rate on Other Borrowings	5.62	5.66	5.00	4.59	4.62
Rate on Interest Bearing Liabilities	3.00	3.21	3.15	2.97	2.89
Spread	4.44	4.36	4.25	4.30	4.49

Performance History



Performance History (Cont'd)



What to Expect

In the following pages, the program will transform the bank's Call Report data into a credible interest rate risk analysis. This is a multi-step process that is outlined below.

Step 1: Risk Tolerance

The first requirement is to determine the benchmark against which to measure the severity of the risk the analysis will measure. This benchmark is the bank's minimum required interest income. The ability to absorb income loss and maintain adequate equity is called Risk Tolerance.

Step 2: Data Conversion and Gap

While Call Report data is a rich source of information, it must be modified for risk measurement to be accurate and credible. This is a three step process.

- Determine the rate sensitivity of the non-maturing balances using their beta factors. The beta factors are the repricing speeds in the Gap report and in Rate Shock Simulations.
- Convert loan maturities to cash flows by amortizing their cash flows and applying current prepayment speeds.
- Estimate the volume of floating rate loans to perform an accurate simulation of income as rates change.

Finally, the user has access to all System Estimates and can adjust these values to reflect management's own analysis.

Step 3: Rate Shock Simulation of Income

The Program performs a full simulation of each balance sheet category under various rate change conditions and calculates the net interest income change for each. A convenient chart shows the impact of rate change over various rate changes and relates the Net Interest Income ratio (% of Earning Assets) to the bank's required Net Interest Margin developed in Risk Tolerance. This is very helpful when presenting risk issues to the board.

Step 4: Economic Value of Equity Risk

The Economic Value of Equity (EVE) is the present value of assets less the present value of liabilities. Present value is calculated using the discounted cash flow method for all balance sheet items. The difference between the assets and liabilities at each rate level is the bank's equity on a present value basis. Critical measurements include both the current EVE and the rate of change of equity as rates change. A convenient chart illustrates the changing nature of this value as compared to the bank's minimum Equity Ratio. The actual value is shown under the chart on page 18.

The results of all these analyses have been summarized in the Executive Summary (Page 2).

Risk Management Strategy

The report provides a simple device to help explain and manage risk. By charting the duration of assets and liabilities and their yields against the Yield Curve, we can separate the components of the interest margin into the asset benefit, the liability benefit and that portion of the margin due to risk taking.

Performance Projections

Using the results of the Net Interest Margin simulation, combined with a credible rate forecast and operating overhead projections, the program presents a performance forecast for the next four quarters.

Margin Risk Tolerance

To provide meaning to rate risk measurements we must set benchmarks against which the sensitivity of risk can be evaluated. The severity of a potential loss depends upon how much the bank can afford to lose and not impair capital. The ability to absorb the losses and still maintain adequate capital is called Risk Tolerance. Risk can be classified as either short-term or long-term. Short-term risk impacts margin earnings in the near term. The Economic Value of the bank's Equity (EVE) reflects the long-term risk to earnings. Margin Risk Tolerance is determined by computing the minimum net interest margin required to meet all expenses, including capital formation and dividends. The Tier 1 Equity Risk Tolerance is simply the difference between the minimum acceptable capital ratio and the bank's capital ratio. This value provides a measurement of the bank's ability to lose capital and still maintain its minimum capital ratio. A minimum capital ratio of 7.00% will be used in our calculations. The Tier 1 Equity Risk Tolerance is determined by subtracting the minimum capital ratio from its capital ratio. The Tier 1 Equity Risk Tolerance for Strategy Bank, Schaumburg, IL is 2.75%.

Calculation of Required Minimum Margin

(000 omitted)

Assets	Current Qtr	Growth Rate	Proj. End	Average	Projected Amount	% Earn Assets	% Avg Assets
Total Assets	838,450	6.3%	891,272	864,861			
Earning Assets	785,483	6.3%	834,968	810,226			
Tier 1 Equity Capital	81,724		81,724	81,724	0	0.00	0.00
Tier 1 Equity/Asset Ratio	9.75%		9.17%				
Dividends (assumed equal to last 4 qtrs)					2,500	0.31	0.29
Earning required to meet capital and dividend needs					2,500	0.31	0.29
Non-Interest Income (% of Avg Assets averaged from last 4 qtrs)					(6,443)	(0.80)	(0.74)
Non-Interest Expense (% of Avg Assets averaged from last 4 qtrs)					28,951	3.57	3.35
Tax Equivalent Adjustment (current quarter)					98	0.01	0.01
Loan Loss Provision (most recent quarter extended)					4,584	0.57	0.53
Estimated Taxes (Effective Rate=23% applied to Required Income)					771	0.10	0.09
Total Other Expenses Supported by Interest Margin					27,960	3.46	3.23
MINIMUM REQUIRED INTEREST MARGIN (FTE)					30,460	3.76	3.52

Calculation of Risk Tolerance

	Amount	%EA	%AA
Current Margin under flat rates applied to new Avg Assets	42,588	5.26	4.92
Required Net Interest Margin (FTE) over next 12 months	30,460	3.76	3.52
Risk Tolerance (Maximum Allowable Net Interest Margin Change)	12,128	1.50	1.40
Risk Limit (Maximum allowable NIM percent change)		28.52 %	

The Risk Tolerance tells us how much the net interest margin could change before the bank's capital would fall below the current or minimum amount due to insufficient capital formation from earnings. A positive value indicates the bank has the ability to absorb adverse rate changes in the net interest margin. However, a negative Risk Tolerance indicates the capital ratio will decline even without rate change. The Risk Limit is the maximum percentage NIM change from the Current Margin (under flat rates) before the bank's capital would fall below the current amount or the designated minimum required amount, whichever is higher.

Factors Impacting Risk Tolerance

The Rate Risk Tolerance calculation addresses asset-liability management in a holistic manner. It recognizes that net interest margin and margin risk are not independent of other aspects of the bank's financial issues. No part of the bank's financial statement stands alone. Focus should be on the bottom line rather than margin or overhead alone. Risk Tolerance can explain why some banks can operate with narrow margin and continue to generate substantial returns for their shareholders, while others achieve large margins and yet bring only 50 basis points to the bottom line. Banks can relieve pressure on the margin by taking steps to reduce those components of Risk Tolerance that cause the minimum margin to increase. By the same token, banks with an adequate Risk Tolerance position could find, for reasons other than rate change, their Risk Tolerance evaporates. This is due, of course, to changes in the components of the bank's Risk Tolerance such as loan losses or increasing operating expenses.

The following analysis identifies changes in each component of the minimum margin calculation that could cause the Risk Tolerance to drop to zero, raising the minimum required margin. For banks with a negative Risk Tolerance, the analysis will indicate the actions necessary to raise the minimum margin to the current margin, i.e.; bring Risk Tolerance to zero.

Note: The following actions are calculated as a single factor effect. Each change is considered to be the only change taking place. However, in reality changes take place across several components and this information is offered only as a guide.

Component	Individual Risks
Capital Formation	If The Capital Formation requirement increased by \$12128, then Risk Tolerance would fall to zero, and the bank's required earnings (Capital Formation + Dividends) would have to be at least \$ 14628.
Dividend Payout	If the Dividend Payout increased by \$12128, or 485%, this would raise the Minimum Margin and cause the Risk Tolerance to fall to zero.
Earning Asset Yield	The yield on earning assets could fall 310bp by next year before the margin would equal the Minimum Margin and wipe out the bank's Risk Tolerance.
Loan Yield	Loan Yield would have to fall 362bp to bring the Risk Tolerance to zero.
Investment Yield	If this yield dropped 332bp over the next year, Risk Tolerance would decline.
Cost of Funds	The rate on deposits would have to increase by 405bp over the next year before the margin would fall to the minimum allowable and wipe out the bank's Risk Tolerance.
Net Interest Margin	If the bank's Net Interest Margin decreases by at least 150bp, its Margin Risk Tolerance will reduce to zero.
Non-Interest Income	If Non-Interest Income fell by \$6443, or 100%, the net overhead would rise and reduce the bank's Risk Tolerance.
Overhead Expense	If Overhead Expenses, such as Salaries, Occupancy and Other Expenses, rose by \$12127, or 42%, this would raise the Minimum Margin and reduce Risk Tolerance to zero.
Loan Loss Provision	Loan Losses would have to increase by \$12127, or 264 %, to wipe out the Risk Tolerance because of raising the Minimum Margin requirement.

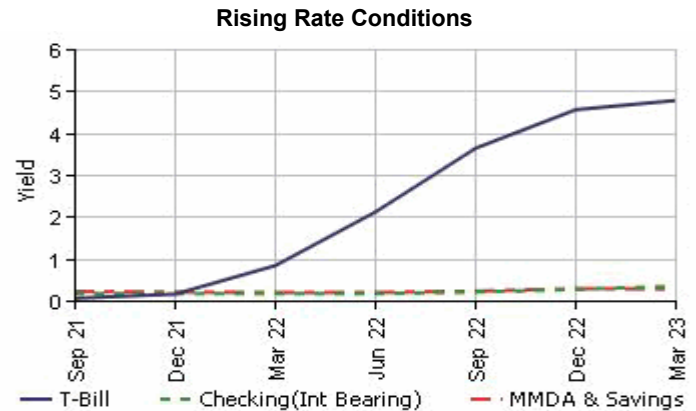
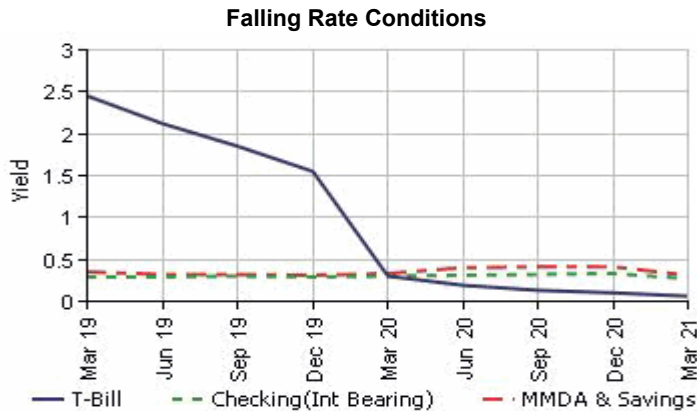
The events outlined above are risks to the bank's current risk position and must be considered as worst case scenarios. In reality, events can, and do, occur simultaneously, Improvements or reductions in performance are dependent upon a combination of events. This list is intended as a means by which to evaluate possibilities.

Rate Sensitivity of Non-Maturing Balances

Cost of Funds Rate (COFR) for non-maturing deposits - Interest Bearing Checking, MMDA and Savings - is under the direct control of the bank. However, there is often a relationship between interest rates and the yields on these accounts. In this section, we attempt to uncover this relationship and use it to determine the COFR behavior on these accounts as rates rise and fall. To accomplish this, we have identified two periods of sustained interest rate change, one rising and one falling. We then correlate the change of interest rates and the COFR for these periods. For falling interest rates, we use March 2019 through March 2021. For rising interest rates, we use the period from September 2021 through March 2023. The correlation we call the Beta. The system will use the Beta to determine the COFR as interest rates rise and fall.

Note: In the case where this correlation is negative, we say the correlation is indeterminate and set the Beta to a zero value.

Non-Maturing Accounts vs T-Bill



Relative Rate Change Speeds Compare to 6 mon. T-Bill

Category	Historical Values			User Defined		
	Gap Beta	Rising Rates	Falling Rates	Gap Beta	Rising Rates	Falling Rate
Checking (Interest Bearing)	2%	3%	0%	2%	3%	0%
MMDA & Savings	1%	1%	0%	1%	1%	0%

The system uses history to develop these Betas. As stated above, COFR, in reality, is at the discretion of the bank and is a product of many factors including both rate change and competition. It is important for the user to determine the validity of these Beta approximations. Therefore, we offer a method that allows the user to incorporate all the known factors when making Beta assumptions.

Estimating the Beta

The best way to estimate how the COFR will change is to ask the question, if interest rates were to rise 100bp over the next year, how much would the bank change its COFR? The same question is valid for falling rate conditions. This value is essentially the Beta for that account. For example, if you think that if interest rates were to rise 100bp and your COFR on an account would increase 25bp, then the Beta is 25%.

Rate Sensitivity Gap

The first requirement is to adjust the Call Report amortizing accounts to cash flow. These include the MBS & CMO as well as the Loan accounts. Shown below are the balance as they come from the Call Report.

		1-3 mth.	3-12 mth.	1-3 Years	3-5 Years	5-15 Years	>15 Years	Total
Govt Agen & Muni Sec	-	-	500	409	219	9,610	5,852	16,590
MBS & CMO Maturities	-	-	-	2,518	708	1,384	5,777	10,387
Loan Maturities as Reported	-	70,813	175,988	183,352	134,659	96,981	2,917	664,710

Following amortization, prepayment speeds are applied. Finally, the Floating Rate Loans are estimated by subtracting the averages maturity from Loans Repricing < 3 months. The results of these adjustments can be seen in the Rate Sensitivity Gap report table below.

The Non- Maturing Deposits are distributed using the Beta Factors calculated on the previous page. The Beta reflects the bank's propensity to adjust offering rates as interest rates change. These Betas should be reviewed and adjusted in the Assumption / Gap section of the program. CD maturities are taken from the Call Report. The user is advised to review these adjustments and make adjustments using the Assumptions in the menu.

Rate Sensitivity Gap Report

As of Jun 2025

Time Buckets	Floating	1-3 mth.	3-12 mth.	1-3 Years	3-5 Years	5-15 Years	>15 Years	Total
FFS & Repos	-	-	-	-	-	-	-	-
Int. Brngs Deps in Bnks	-	-	88,921	-	-	-	-	88,921
Gov, Agn & Mun Sec.	-	501	485	397	212	9,320	5,675	16,590
MBS & CMO Maturities Adjust	-	498	1,539	2,060	749	3,344	2,196	10,386
Total Debt Securities	-	999	2,024	2,457	961	12,664	7,871	26,976
Loan Mats Adjusted	13,365	160,633	211,891	168,600	52,651	56,429	1,141	664,710
Total Earning Assets	13,365	161,632	302,836	171,057	53,612	69,093	9,012	780,607
Checking (Int Bearing)	3,396	-	-	166,421	-	-	-	169,817
MMDA & Savings	900	-	-	89,120	-	-	-	90,020
Total Savings Deposits	4,297	-	-	255,540	-	-	-	259,837
CDs < \$250K	-	55,083	129,914	28,815	4,239	-	-	218,051
CDs > \$250K	-	29,193	71,564	1,536	1,795	-	-	104,088
Total Time Deposits	-	84,276	201,478	30,351	6,034	-	-	322,139
Other Borrowings	-	-	15,500	-	-	-	-	15,500
FFP and Repos	-	-	-	-	-	-	-	-
Total Borrowed Funds	-	-	15,500	-	-	-	-	15,500
Total Int Bearing Liabs	4,297	84,276	216,978	285,891	6,034	-	-	597,476
R.S. Gap	9,068	77,356	85,858	(114,835)	47,578	69,093	9,012	183,131

Risk Indicators from Gap Analy

Cumulative GAP	9,068	86,425	172,282
Cumulative RSA/ RSL	3.11	1.98	1.56
Time-Weighted 12 mth. Gap			105,729

Net Interest Margin Simulations (1 Year Rate Shock)

The Gap Analysis provides the basis for more detailed analysis in the simulation model. Also, gap results are popular rate risk indicators. However, to truly evaluate the impact of rate change on income, simulation is the best technique because variables are changed for the various rate conditions. Each category's interest change is calculated as rates move up and down. In addition, the repayment speeds and repricing speeds are changed.

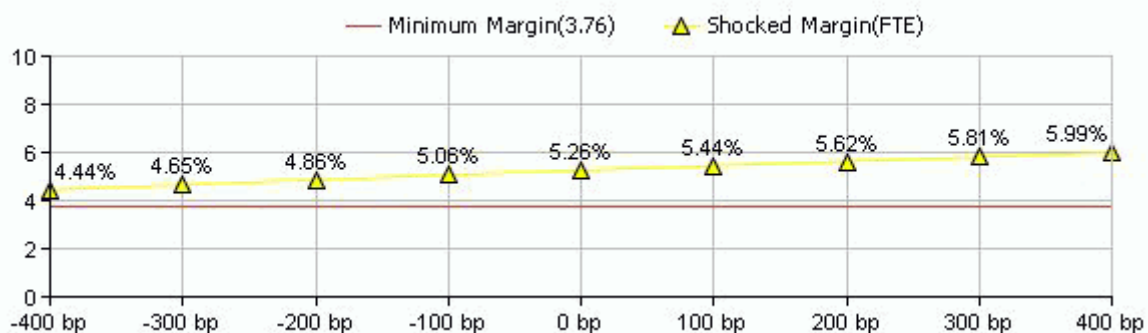
Rate Shock is a method for stress testing the Net Interest Margin (NIM) over the next four quarters under several rate change levels. These levels span 100bp increments up and down from the current interest rates. In order to simulate activity, maturing balances are replaced with the new balances at the new rate level, and repricing balances are adjusted to the new rate shock level. The interest is recalculated for each level along with the new average yield. NIM is then calculated and a margin risk profile is developed. The results of these calculations can be seen in the chart below.

Rate Change Immediate	-400bp	-300bp	-200bp	-100bp	Current	+100bp	+200bp	+300bp	+400bp
Int. Income									
FFS, Repos & Bank CD	2,579	2,912	3,246	3,579	3,913	4,246	4,579	4,913	5,246
Loans *	44,413	46,805	49,162	51,483	53,768	56,027	58,273	60,525	62,778
Securities (Tax Eqv.)	842	848	867	884	901	910	922	933	944
Total Interest Income	47,833	50,566	53,275	55,946	58,581	61,184	63,774	66,371	68,968
Int. Expense									
Interest Bearing Checking	2,479	2,479	2,479	2,479	2,479	2,530	2,581	2,632	2,683
MMDA	15	15	15	15	15	15	16	16	17
Savings	219	219	219	219	219	228	236	245	253
CDs	9,724	10,759	11,794	12,829	13,864	14,899	15,934	16,969	18,004
Fed Funds & Borrowings	484	542	600	658	716	774	832	890	949
Total Costs of Funds	12,921	14,014	15,107	16,200	17,293	18,447	19,600	20,753	21,906
Net Interest Income	34,913	36,552	38,168	39,746	41,288	42,737	44,174	45,618	47,062
Actual Dollar Risk	(6,375)	(4,735)	(3,120)	(1,541)		1,450	2,886	4,331	5,775
Percent of Risk	(15.44)%	(11.47)%	(7.56)%	(3.73)%		3.51 %	6.99 %	10.49 %	13.99 %
Percent of Avg. Assets	(0.74)%	(0.55)%	(0.36)%	(0.18)%		0.17 %	0.33 %	0.50 %	0.67 %

* Yield Adjusted for PPP based on user input in Loan Assumptions.

When the Interest Income is translated into Net Interest Margin as a % of current Earning Assets, we can compare the simulated margins over rate changes to the bank's minimum required margin found in Risk Tolerance.

Rate Shocked Margin vs Minimum Margin



Back-Checking results: Average Error over past four years = +/-23 bp

Net Interest Margin Simulations (2 Year Rate Shock)

The January 2010 Advisory on Interest Rate Risk released by the joint regulatory agencies recommends that the time horizon of the Rate Shock of Margin Simulation represent a rate shocked income spanning two full years. In the analysis below, the system has calculated the income change for each shock level and displays the cumulative income and expense over the two-year time frame.

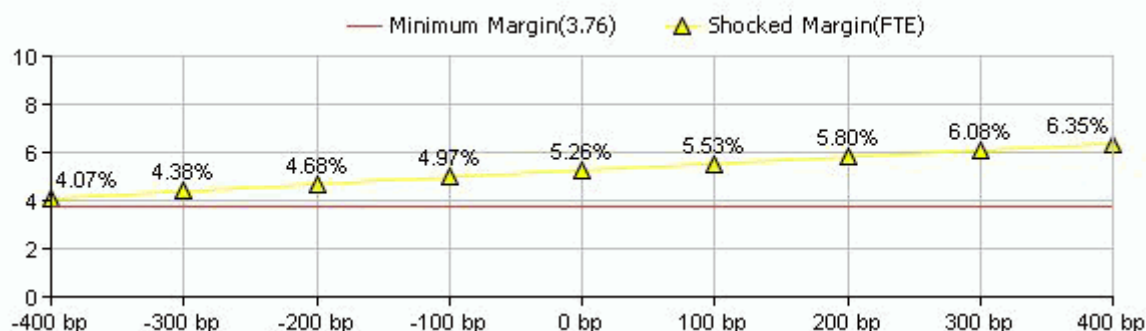
As in the one-year analysis, the shock increments are 100bp up and down. These are immediate and sustained movements and are applied to the re-pricing data for each period. Prepayment speeds, callable information as well as all other assumptions used in the one-year are also used in the 2-year analysis. All the change ratios in the table are calculated as changes from the zero (current column).

Rate Change Immediate	-400bp	-300bp	-200bp	-100bp	Current	+100bp	+200bp	+300bp	+400bp
Int. Income									
FFS, Repos & Bank CD	2,934	4,157	5,380	6,602	7,825	9,048	10,270	11,493	12,716
Loans *	80,694	87,553	94,313	100,974	107,535	114,028	120,480	126,953	133,425
Securities (Tax Eqv.)	1,617	1,634	1,693	1,750	1,803	1,841	1,882	1,924	1,965
Total Interest Income	85,245	93,344	101,386	109,326	117,164	124,917	132,633	140,370	148,106
Int. Expense									
Interest Bearing Checking	4,959	4,959	4,959	4,959	4,959	5,061	5,162	5,264	5,366
MMDA	29	29	29	29	29	30	32	33	34
Savings	439	439	439	439	439	456	473	489	506
CDs	15,275	18,388	21,501	24,615	27,728	30,841	33,954	37,068	40,181
Fed Funds & Borrowings	580	793	1,006	1,219	1,432	1,645	1,858	2,072	2,285
Total Costs of Funds	21,281	24,607	27,934	31,260	34,587	38,033	41,479	44,926	48,372
Net Interest Income	63,964	68,736	73,452	78,066	82,577	86,883	91,153	95,444	99,734
Actual Dollar Risk	(18,613)	(13,840)	(9,125)	(4,511)		4,307	8,577	12,867	17,157
Percent of Risk	(22.54)%	(16.76)%	(11.05)%	(5.46)%		5.22 %	10.39 %	15.58 %	20.78 %
Percent of Avg. Assets	(2.15)%	(1.60)%	(1.06)%	(0.52)%		0.50 %	0.99 %	1.49 %	1.98 %

* Yield Adjusted for PPP based on user input in Loan Assumptions.

While the income in the table is cumulative, the Net Interest Margin is stated as a ratio in the chart to maintain consistency. Since the analysis requires a flat (no growth) balance sheet, the current end of period asset value is used to calculate the NIM (Tax Equivalent)

Rate Shocked Margin vs Minimum Margin



Net Interest Margin Simulations (Cont'd)

Using the Rate Shock graph to predict margin

In the performance projections (page 20) section of this report, we will combine this chart with a professional rate forecast to project the bank's overall margin for the next four (4) quarters. Using the Weighted Average Rate change, based on the bank's balance sheet structure and the forecast yield curve, we find the rate change on the Shock Level axis (X-axis). Then, refer up to the Rate Shocked Margin line to find the projected margin as a percent of Average Earning Assets. The reader will note a difference between the margin value derived here and the value reported on the Performance Projections page. The reason for this is that the analysis is based upon Average Earning Assets while the Performance Projections value is based on Total Average Assets which allows us to compute the bank's projected ROA.

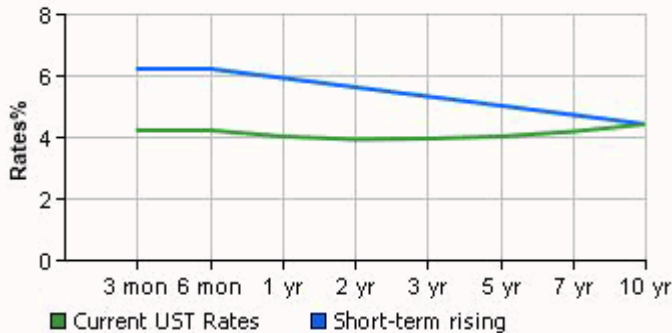
Yield Curve Risk Assessment

Yield Curve Risk Assessment

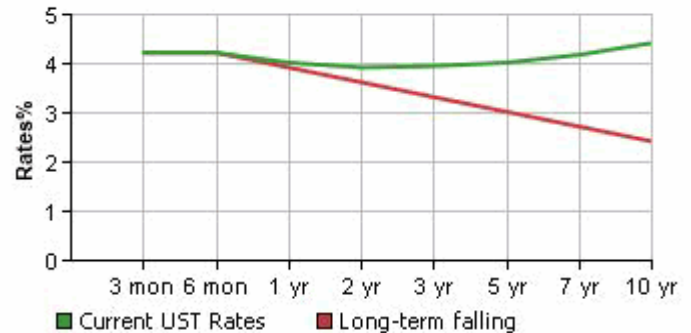
By using sensitivity analysis, we can determine a worst-case impact on Net Interest Income from a non-parallel shift in the yield curve. The long-end of the curve generally drives the asset yields and the short-end tends to most significantly impact the cost of liabilities.

To create a sufficiently meaningful yield curve shift we use two approaches. In the first scenario, long-term rates remain unchanged while short-term rates rise to a point where the yield curve becomes slightly inverted. In the second scenario, long-term rates fall as far as possible while short-term rates remain unchanged. The worst-case scenario will allow us to assess the bank's yield curve risk. These two scenarios are depicted in the charts below.

Long-term flat, short-term rising



Short-term flat, long-term falling



The information below provides the results of these two methods to determine the worst-case impact on Net Interest Income and Equity.

Calculating Yield Curve Risk

Total Assets	838,450
Base Case Net Interest Income	41,288

Scenario #1

Interest Income - Long Term Rates Flat	58,581
Less Int Exp - Short Term Rates Rising	19,600
Net Interest Income	38,981
Dollars at Risk	2,306
Percent Change from Base-Case NII	-5.59%

Worst-Case Net Interest Income

Scenario #2

Interest Income - Long Term Rates Fall	53,275
Less Int Exp - Short Term Rates Flat	17,293
Net Interest Income	35,981
Dollars at Risk	5,306
Percent Change from Base-Case NII	-12.85%

35,981

Risk Adjusted Earnings and Dividends

	Amount	% of Assets
Worst-Case Net Interest Income	35,981	
Less Other Expenses and Dividends (from Risk Tolerance)	30,460	
Worst Case Adjustment to Equity	5,521	
Adjusted Current Tier 1 Equity for Worst-Case	87,245	10.41%

Risk to Current Equity - Worst Case

Current Tier 1 Equity	81,724	9.75%
Adjusted Equity for Worst Case	87,245	10.41%
Gain (loss) to Current Tier 1 Equity	5,521	0.66%

Risk to Minimum Equity - Worst Case

Minimum Tier 1 Equity	58,692	7.00%
Adjusted Equity for Worst Case	87,245	10.41%
Cushion (Shortfall) to Minimum Equity	28,553	3.41%

Rate Shocked Economic Value of Equity

Economic Value of Equity (EVE) is a measure of long-term interest rate risk. EVE is the present value of assets less the present value of liabilities. In this analysis, the program calculates the discounted cash flow (present value) of each category on the balance sheet under each of nine rate conditions.

The percent of change in EVE is called the Duration of Equity and is a measure of the volatility of value and, therefore, risk. Duration is the percent change in value for each 100bp change in rate and has the dimensions of time, months or years. Each year equals a 1% change in present value for 100bp change in rates. Because duration has the dimensions of time, longer duration equals greater risk.

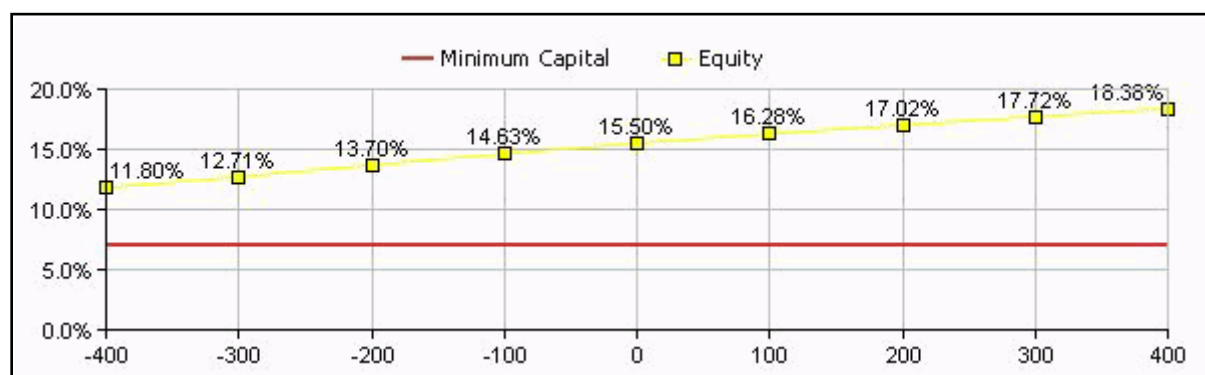
EVE calculations require good cash flows, as well as some knowledge of embedded options for reasonable accuracy. Because the system is calculating cash flows, it is possible to estimate the maturity and prepayments at all rate levels in order to approximate durations. The present values for the major categories at various rate change levels are calculated using their durations. Loan Present values are computed using discounted cash flows and current market rates. The Fair Value of Securities at the zero point is taken from the Call Report.

Fair Values									
Rate Shocks	-400bp	-300bp	-200bp	-100bp	Current	+100bp	+200bp	+300bp	+400bp
FFS & Other	91,077	90,538	89,999	89,460	88,921	88,382	87,843	87,304	86,765
Loans *	705,066	695,822	686,764	677,884	669,177	660,687	652,440	644,517	636,867
Loan Loss Reserve	(9,589)	(9,589)	(9,589)	(9,589)	(9,589)	(9,589)	(9,589)	(9,589)	(9,589)
Securities (Fair Value)	34,522	32,650	30,768	28,877	26,977	25,045	23,109	21,174	19,240
Non-Earning Assets	62,556	62,556	62,556	62,556	62,556	62,556	62,556	62,556	62,556
Assets (EV)	883,632	871,976	860,497	849,188	838,042	827,081	816,359	805,963	795,840
Non-Int Bearing Chkg	150,072	144,408	138,580	133,068	127,846	122,910	118,236	113,802	109,604
Int Bearing Chkg	180,254	173,577	166,704	160,200	154,036	148,392	143,045	137,969	133,162
MMDA	5,689	5,475	5,255	5,046	4,849	4,664	4,490	4,324	4,167
Savings	85,318	82,109	78,807	75,683	72,725	69,957	67,335	64,852	62,498
CDs	331,519	329,208	326,950	324,743	322,584	320,473	318,408	316,386	314,407
FFP and Repos	0	0	0	0	0	0	0	0	0
Other Borrowings	15,876	15,782	15,688	15,594	15,500	15,406	15,312	15,218	15,124
Non - Paying Liabs	10,630	10,630	10,630	10,630	10,630	10,630	10,630	10,630	10,630
Liabilities (EV)	779,357	761,189	742,613	724,964	708,170	692,433	677,455	663,182	649,593
EV Equity	104,275	110,787	117,884	124,224	129,872	134,648	138,904	142,781	146,247
EVE Risk (% Change)	(19.71)%	(14.70)%	(9.23)%	(4.35)%	0.00 %	3.68 %	6.95 %	9.94 %	12.61 %

* Yield Adjusted for PPP based on user input in Loan Assumptions.

(Adjustments have been made to account for Goodwill and Intangibles)

Economic Value of Equity as a Percentage of Present Value of Assets

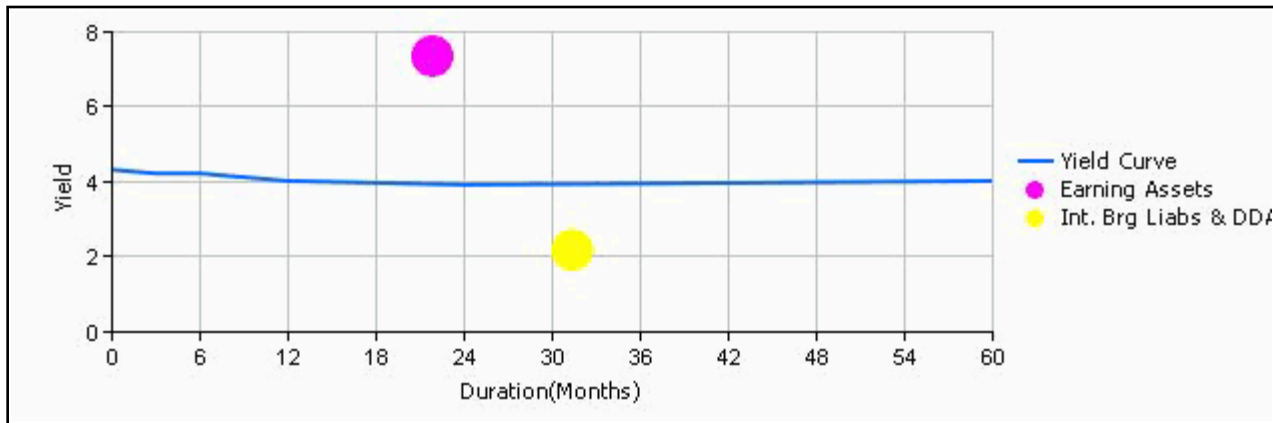


The user is encouraged to review all of the assumptions for bond maturities, the securities, durations, loan prepayments and maturity of borrowings. The bank's Equity Risk provides a long term perspective on earnings due to rate change.

Rate Risk Management Strategy

Risk is present when there is a repricing term mismatch between assets and liabilities. If the volume and the term of these opposing balances were equal and priced off of the same indexes, theoretically there would be no interest rate risk. The reality, however, is that there is a mismatch. Gap is one technique for measuring this mismatch; Plansmith's Risk Management Bubbles is another. The Bubbles method is like a visual Gap report; however, there are 3 differences. 1) Bubbles are easier to understand, 2) bubbles account for the entire term of the bank's position, and 3) by including the current Yield Curve the risk management strategy is more apparent.

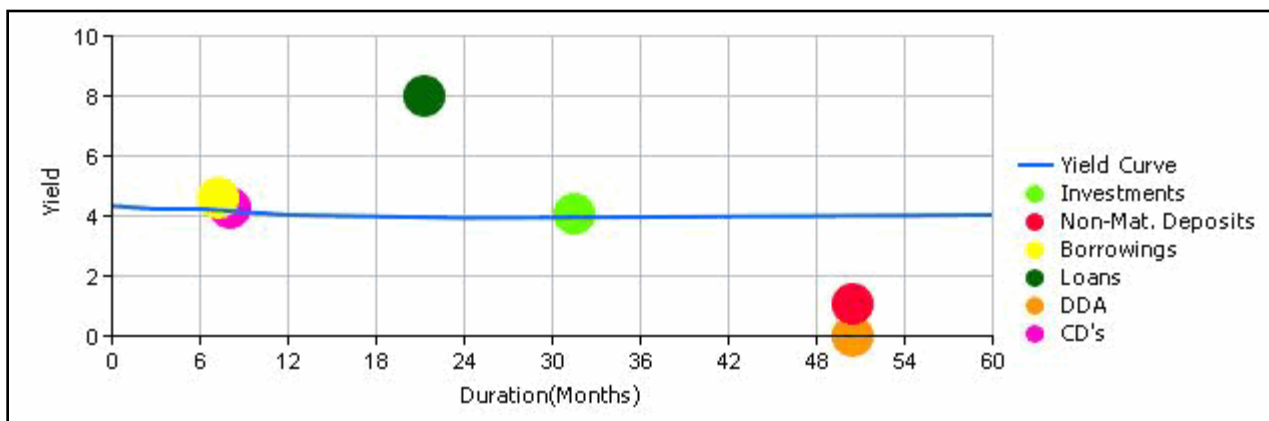
There are also 3 elements in the Bubbles method :1) The term and yield of assets (The yields are not tax equivalent) , 2) the term and cost of liabilities, and 3) the Yield Curve. Now we can quantify the components of the margin; the Asset Benefit (the vertical distance from the Asset Bubble to the Yield Curve), the Deposit Benefit (the distance from the Liability Bubble to the Yield Curve), and the Basis Risk Component (the vertical distance in the Yield Curve between Asset and Liability Bubbles). Dividing the Basis Risk Component (basis points) by the Duration Mismatch (months) quantifies the Risk / Reward Trade- Off.



Important Values

	<u>Yield</u>	<u>Duration</u>	<u>Components of Margin</u>	
Earning Assets *	7.38	22	Asset Benefit	3.46
Interest Bearing Liabilities and DDA	2.21	31	Deposit Benefit	1.71
Margin	5.17	-9	Mismatch Risk Component	0.00

Dividing the Risk Component by Margin Duration, gives us the Risk / Reward Trade- Off of 0.00 bp per month. This means that for each month the margin duration increases (risk), margin (reward) will change by the slope of the Yield Curve. This assumes the asset or liability yields maintain their spread to the Yield Curve as they move. To help identify adjustment opportunities, the chart below shows the components of assets and liabilities .



* Yield Adjusted for PPP based on user input in Loan Assumptions.

Performance Forecasts

This performance forecast combines the Blue Chip Financial Forecast's interest rate projections with the Rate Shock Simulation. Since the margin has been computed for various rate changes, we need only apply the rate forecast from Blue Chip. The first step is to determine the overall rate change based on the distribution of the assets and liabilities along the Yield Curve and Prime Rate. Next, the weighting factors are determined as the percentage of assets and liabilities influenced by these rates. From this, the Weighted Average Rate Change is computed to be used in the Simulation.

Blue Chip Interest Rate Forecast

	Proj. 1 QTR	Proj. 2 QTR	Proj. 3 QTR	Proj. 4 QTR	Proj. Avg 4 QTRs	Current Quarter	Weighting Factors	Rate Change
FED Funds (QA)	4.30	4.10	3.80	3.60	3.95	4.33	0%	-38bp
3 mo TBILL (QA)	4.20	4.00	3.70	3.50	3.85	4.23	20%	-38bp
6 mo TBILL (QA)	4.20	3.90	3.70	3.60	3.85	4.14	17%	-29bp
1 yr CMT (QA)	4.00	3.80	3.60	3.50	3.73	4.06	8%	-34bp
2 yr CMT (QA)	3.90	3.70	3.50	3.50	3.65	3.89	3%	-24bp
Prime (QA)	7.40	7.20	6.90	6.70	7.05	7.50	52%	-45bp
Weighted Average Rate Change =								-39bp

Projected rate change of -39 bp results in a -8 bp change in Net Interest Margin. Projected 12 month Net Interest Margin 5.33% (EA) or 5.00% of Total Assets.

Projected Income Statement (% of Total Average Assets)

	Trailing 4 Qtrs.	Current Quarter	Projected 4 Qtrs.	Proj. P & L (\$000)
Interest Margin (FTE)	4.77%	4.87%	5.00%	43,243
Loan Loss Provision	0.43%	0.53%	0.53%	4,584
Net Interest Margin	4.34%	4.34%	4.47%	38,659
Non Interest Income	0.74%	0.76%	0.74%	6,400
Non Interest Expense	3.35%	3.34%	3.35%	28,973
Net Overhead	2.60%	2.58%	2.60%	22,486
Pre - Tax Income	1.74%	1.76%	1.87%	16,173
Sec G/L, Ext Items	0.00%	0.00%	0.00%	0
FTE Adjustment	-0.01%	-0.01%	-0.01%	(86)
Estimated Income Taxes	-0.39%	-0.41%	-0.44%	(3,805)
Return on Average Assets	1.34%	1.34%	1.42%	12,281

Assets, Earnings & Capital Forecast

(000) omitted	Current Quarter	Growth Rate	Projected over next 4 Qtrs
Total Assets	838,450	6.3%	891,272
Earning Assets	785,483	6.3%	834,968
Annualized Earnings	11,095	10.7%	12,281
Projected Dividends			2,500
Tier 1 Equity Capital	81,724	12.0%	91,505
Tier 1 Equity Capital Ratio	9.75 %		10.27%
Return on Tier 1 Equity	13.58 %		14.18%

Risk Tolerance Assumptions

The assumptions used on this page are applied only to the Margin Risk Tolerance Report (page 11) and Performance Forecast Report (page 20). These Risk Tolerance assumptions are NOT applied to Net Interest Margin Simulations, Rate Shocked EVE, or Rate Sensitivity Gap.

	System Estimates	User Defined
Minimum Capital Ratio	7.00	%
Total Asset Growth Rate	6.30	%
Projected Dividends (enter as a negative to indicate capital injection)	2,500	(000's)
Projected Non- Interest Income	6,443	(000's)
Projected Non - Interest Expense	28,951	(000's)
Projected Loan Loss Provision	4,584	(000's)
Estimated Effective Tax Rate	23.56	%
" S " Corp No		

Note: All system estimates are estimated from the bank's historical and current data or from outside sources. It is the responsibility of the user to determine the usability of these assumptions and make changes appropriate to their bank and market conditions.

Loan Assumptions

	System Estimates					User Defined	
Market Rate on Loans used as Discount Rate	8.03					%	
Amount of PPP Loan Fees booked this Qtr						(000's)	
Volume of Floating Loans without Floor	13,365					(000's)	
Floating Loans Above Floor	0					(000's)	
Wt Avg Yield on Floating Loans Above Floor	8.03					%	
Weighted Avg. Contractual (Indexed) Rate	0.00					%	
Weighted Average Floor Rate	0.00					%	
Weighted Average Ceiling Rate						%	
Floating Loans at their Floor	0					(000's)	
Weighted Avg. Contractual (Indexed) Rate	0.00					%	
Weighted Average Floor Rate	0.00					%	
Weighted Average Ceiling Rate						%	
	1-3 mth	3-12 mth	1-3 year	3-5 year	5-15 year	>15 year	
RE Loans as reported	13803	45053	74083	59111	44006	2739	(000's)
Volume of NonARMs							(000's)
Volume of ARMs							(000's)
Floor on ARMs							%
Ceiling on ARMs							%
Wt. Avg Contractual							%
Amortize Loans	Yes						

Loan Prepayment Percentages at various Rate Levels

Level	-400	-300	-200	-100	0	+100	+200	+300	+400
Plansmith Defaults	10.00	8.75	7.50	6.25	5.00	4.50	4.00	4.00	4.00
Adjusted									

Note: 'Plansmith Defaults' are prepayment assumption estimates based on Plansmith's analysis of recent industry /client data. The user should review these assumptions and make changes appropriate to their bank's risk profile and to market conditions . It is also highly recommended that the user run alternative prepayment scenarios to analyze the impact on results due to assumption changes.

Log File of individual Amortizations and Prepayments

1 - 4 FAMILY RESIDENTIAL REAL ESTATE LOANS

Rate used to Amortize = 7.95

Amortization	Immed.	1-3 mon	3-12 mon	1-3 yrs	3-5 yrs	5-15 yrs	> 15 yrs
1-3 mth = 13,803							
Amortization		13,803					
3-12 mth = 45,053							
Amortization		17,754	27,299				
1-3 Yr = 74,083							
Amortization		8,631	26,944	38,508			
3-5 Yr = 59,111							
Amortization		3,171	9,899	29,463	16,578		
5-15 Yr = 44,006							
Amortization		728	2,274	6,768	7,930	26,306	
>15 Yr = 2,739							
Amortization		14	44	131	154	1,269	1,127
Total RE Loans		44,102	66,460	74,870	24,662	27,574	1,127

Balances in periods >12 months are prepaid into 1-3 mon and 3-12 mon time periods

Pre Payment Rate = 0.05

After Prepay		45,705	71,269	71,127	23,429	26,195	1,071
--------------	--	--------	--------	--------	--------	--------	-------

ALL OTHER LOANS

Rate used to Amortize * = 8.07

Amortization	Immed.	1-3 mon	3-12 mon	1-3 yrs	3-5 yrs	5-15 yrs	> 15 yrs
1-3 mth = 57,010							
Distribute Floating	13,365	43,645					
3-12 mth = 130,935							
Amortization		51,586	79,349				
1-3 Yr = 109,269							
Amortization		12,717	39,722	56,830			
3-5 Yr = 75,548							
Amortization		4,043	12,630	37,652	21,223		
5-15 Yr = 52,975							
Amortization		871	2,721	8,112	9,528	31,743	
>15 Yr = 178							
Amortization		1	3	8	10	82	74
Total Other Loans	13,365	112,863	134,425	102,603	30,761	31,825	74

Balances in periods >12 months are prepaid into 1-3 mon and 3-12 mon time periods

Pre Payment Rate = 0.05

After Prepay	13,365	114,929	140,622	97,473	29,223	30,234	70
--------------	--------	---------	---------	--------	--------	--------	----

Total Loans	13,365	160,633	211,891	168,600	52,651	56,429	1,141
--------------------	---------------	----------------	----------------	----------------	---------------	---------------	--------------

* Yield Adjusted for PPP based on user input in Loan Assumptions.

Securities Assumptions

	System Estimates	User Defined
Maturity of Interest Brng Deps in Other Banks	6	month
Reverse Repo Maturity	1	month
Repurchase Agreements Maturity	1	month
US Agencies Callable Spread	50	bp
US Agencies Callable Percentage	50.00	%
Dividend on Equity Securities	0	(000's)

Adjust Gap Report	Immediate	1-3 mth	3-12 mth	1-3 year	3-5 year	5-15 year	> 15 year
Int. Brng Deps in Other Banks Calc.			88,921				
Int. Brng Deps in Other Banks Adj.							
Gov't, Agen & Munis Calc.		501	485	397	212	9,320	5,675
Gov't, Agen & Munis Adj.							
Other Borrow Calc.			15,500				
Other Borrow Adj.							

Duration and Market Value of Securities at different Rate Shock Levels

Level	-400	-300	-200	-100	0	+100	+200	+300	+400
Default Duration-mths	84	84	84	85	85	86	86	86	86
Resulting User Def Dur-mths									
Default Market Value	34,522	32,650	30,768	28,877	26,977	25,045	23,109	21,174	19,240
User Defined Market Value									

Note: All system estimates are estimated from the bank's historical and current data or from outside sources. It is the responsibility of the user to determine the usability of these assumptions and make changes appropriate to their bank and market conditions.

Deposit Assumptions

	Rising Rates	Adjusted	Falling Rates	Adjusted
Beta for Checking (Interest Bearing)	3.00		0.00	%
Beta for MMDA	1.00		0.00	%
Beta for Savings	1.00		0.00	%
Beta for CDs	71.00		71.00	%

	User Defined	Reclassified Yield used in NIM Shock
MMDA After Reclassifying	(000's)	%
Savings After Reclassifying	(000's)	%
DDA After Reclassifying	(000's)	%
Interest Bearing Checking After Reclassifying	(000's)	%

	Rising Rates	Adjusted	Falling Rates	Adjusted
Decay term for Non-Interest Bearing Checking Bal.	100		100	Month(s)
Decay term for Interest Bearing Checking Bal.	100		100	Month(s)
Decay term for MMDA Bal.	100		100	Month(s)
Decay term for Savings Bal.	100		100	Month(s)

Discount Rates	System Estimates*	User Defined
Non Interest Bearing Checking Accounts	3.92	%
Interest Bearing Checking Accounts	3.92	%
MMDA	3.92	%
Savings	3.92	%
CDs	4.11	%

*System Estimates are based on Treasury Yield Curve with similar durations.

Note: All system estimates are estimated from the bank's historical and current data or from outside sources. It is the responsibility of the user to determine the usability of these assumptions and make changes appropriate to their bank and market conditions.

26-Aug-2025 10:03

Back-Testing

In order to validate the accuracy of the model, the system performs back-testing of results by comparing the difference between calculated Net Interest Margin and Actual Net Interest Margin over 4 years. It then averages the absolute values of those differences to determine an Average Error.

Net Interest Margin Comparison			
Period	Actual Change	Projected Change	Difference
YE 2020 - YE 2021	0.2578	0.0060	0.2518
YE 2021 - YE 2022	0.0295	0.0601	0.0306
YE 2022 - YE 2023	-0.1885	0.1079	0.2964
YE 2023 - YE 2024	-0.4132	-0.0729	0.3403
Average Margin of Error (+/-)			23 bp

Rate Forecast Comparison			
Period	Actual Change	Projected Change	Difference
YE 2020 - YE 2021	-0.0084	0.0433	0.0517
YE 2021 - YE 2022	2.1543	0.2777	-1.8766
YE 2022 - YE 2023	0.8510	0.5170	-0.3340
YE 2023 - YE 2024	-0.3108	-0.4157	-0.1049
Average Margin of Error (+/-)			-57 bp

'N/A' indicates back-testing data analytics exceeded a +/- 0.75 margin of error threshold. This threshold applied to periods prior to YE 2023 - YE 2024.

Glossary of Terms

Term	Definition
Average 12 Month Gap	The time-weighted average gap over the next four quarters. In the calculation, each incremental gap is weighted based on the remaining time left until the end of the year.
Average Term	The time-weighted average maturity or repricing of assets and liabilities.
Average Error	To validate the behavior characteristics of a model, the identical model is constructed for historical balance sheets and predicted results are compared to the actual historical results.
Beta Adjustment	The percentage of total outstandings for a non-maturing balance sheet category, derived from the correlation between offering rate changes and interest rate changes. These balances will be placed in the floating bucket of the Gap report. The remaining balances are to be placed outside the gap window in the 1-3 year time bucket. These categories are; in Int Bear Chkg, Svgs, & MMDAs.
Capital Risk Tolerance	The reduction in bank equity that would cause the equity to fall to the minimum required ratio-to-assets. It is computed as the current capital minus the minimum capital required.
Cumulative Gap	The sum of the periodic rate sensitivity gaps over the next 12 months.
Dollars at Risk	The actual income loss in dollars due to rate change from the current level. It is computed by subtracting the net interest income, at each Rate Shock level, from the current or zero change level. Only potential losses are reported.
Duration	The percent change in market value (price) of a financial instrument for every 100bp change in interest rates. Duration is usually expressed in months. Divide the Duration in months by 12 to convert to a percentage.
Economic Value of Equity (EVE)	This is the difference between market value of assets and market value of liabilities. EVE is the present value of assets less the present value of liabilities using a discounted cash flow method.
Floating	A time bucket in the Gap report indicating immediately repriceable and floating rate balances. In the Rate Shock analysis, rates on these balances will change as rates change.
Fully Tax Equivalent (FTE)	This is the adjustment to yield and margin that accounts for the non-taxable or partial taxability of some investments and loans.
Margin Risk Tolerance	The difference between the bank's current net interest margin and its minimum required margin needed to meet all expenditures, including dividends and capital formation (if needed).
Market Rate	This is the current competitive rate on new loans within the bank's trade area. The market rate is used as the discounting rate in the market value calculation.
Minimum Margin	This is the net interest margin needed to meet all expenditures as well as dividends and capital formation if needed. If the net interest margin falls below the minimum, then capital formation, and ultimately the capital ratio, will fall.
Rate Sensitivity Gap	The difference between repricing or maturing assets and liabilities in a given time period .
Rate Speed Change Adjustment	Rate change speed for non-maturing balances analyzed from historical data to calibrate their change relative to interest rate changes. This typically has the effect of lengthening the average repricing life of these balances.
Rate Shock	A technique that simulates immediate and sustained rate changes over the next twelve months, and the investment of maturity cash flows and repricing of both earning assets and interest bearing liabilities. The results show the behavior of the bank's interest margin as rates move up and down.
Risk Cushion	The difference between the risk adjusted margin for a 100bp rate change, or the risk adjusted capital for a 100bp rate change, and the current margin or capital.