



Financial
Performance

Regulatory
Compliance

◆ Risk Management Strategy & Solutions ◆

"Navigating Fearlessly Through a Turbulent Environment"

April 27, 2016

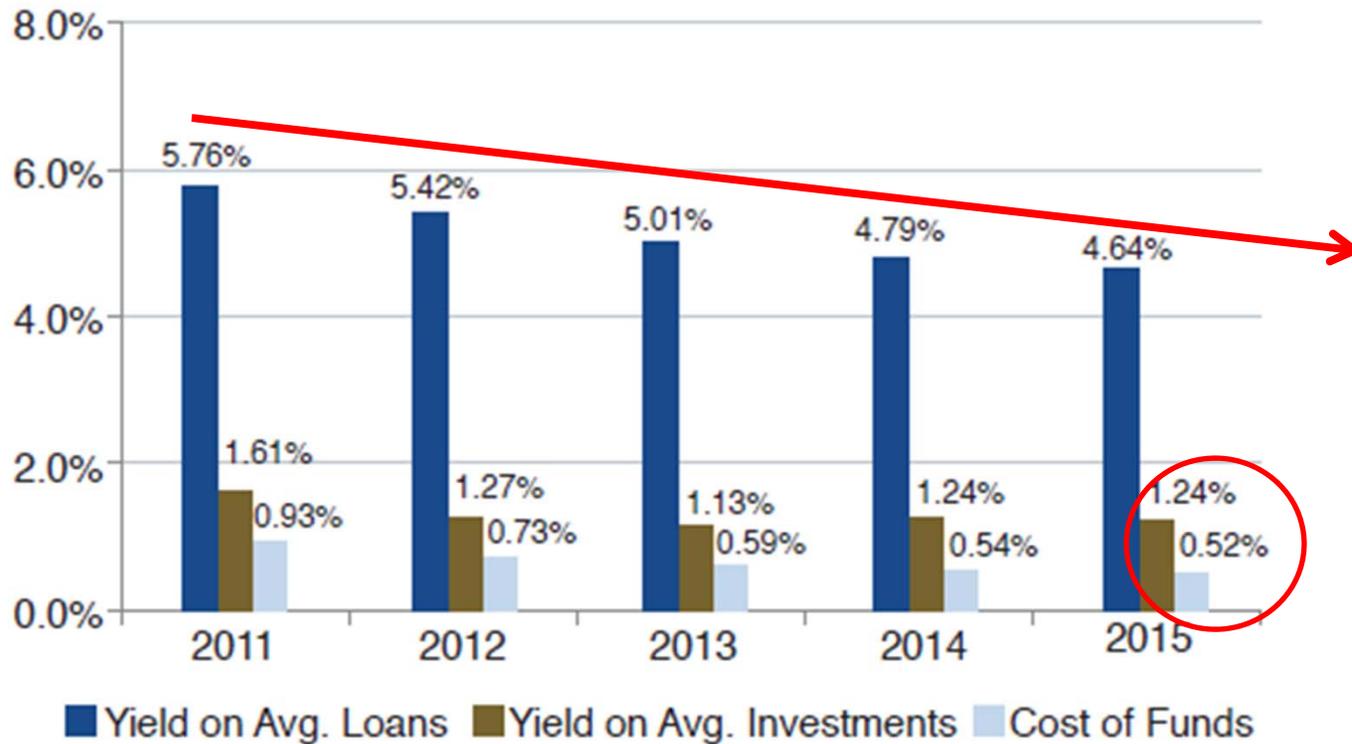
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Number of Insured Credit Unions Reporting

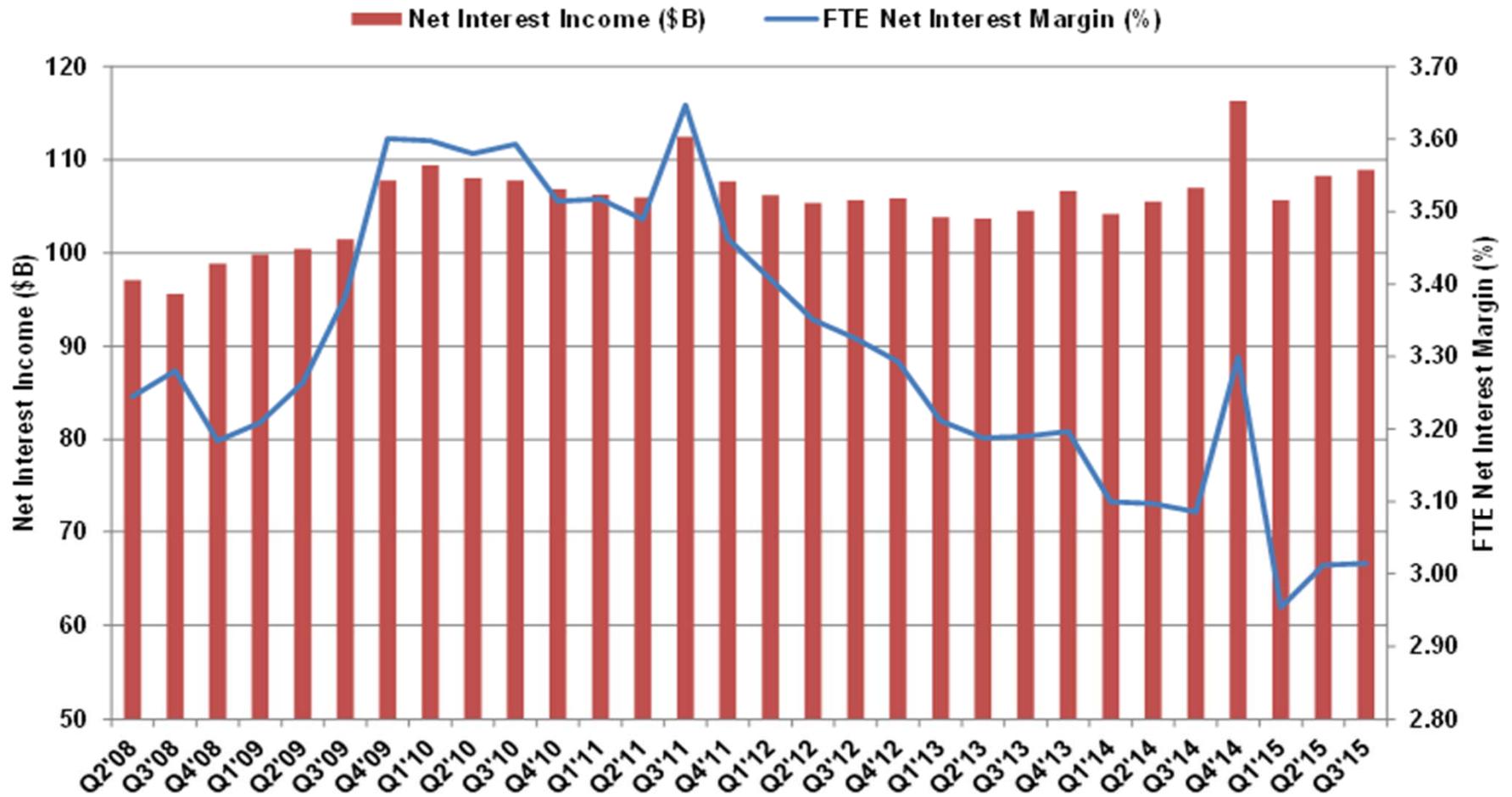
	Federal Charter	State Charter	Total
2011	4,447	2,647	7,094
2012	4,272	2,547	6,819
2013	4,105	2,449	6,554
2014	3,927	2,346	6,273
2015	3,764	2,257	6,021



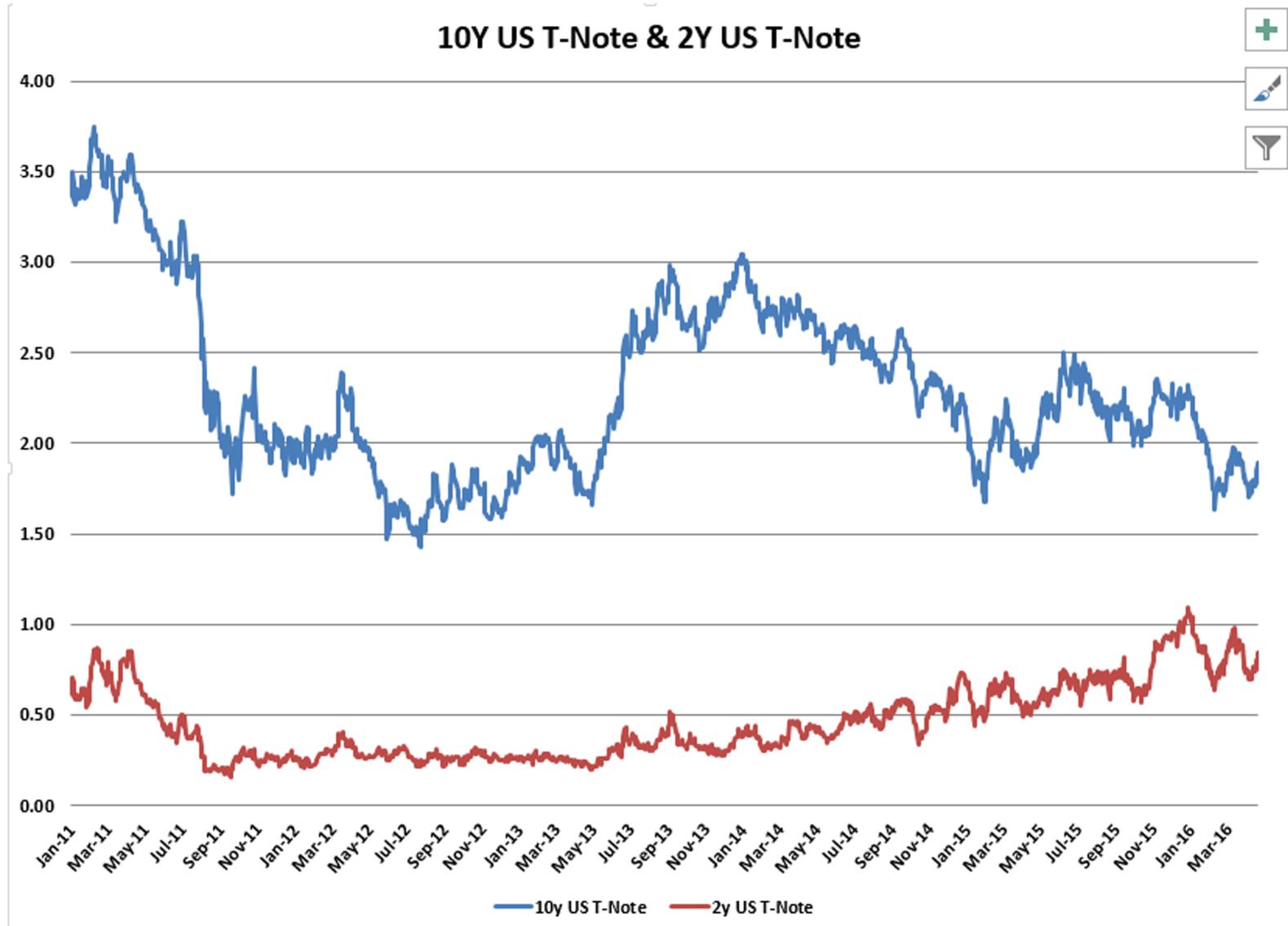
Yields vs. Cost of Funds



Net Interest Income, NIM for US Banks



Falling Rates & Flatter CURVE killing Margins



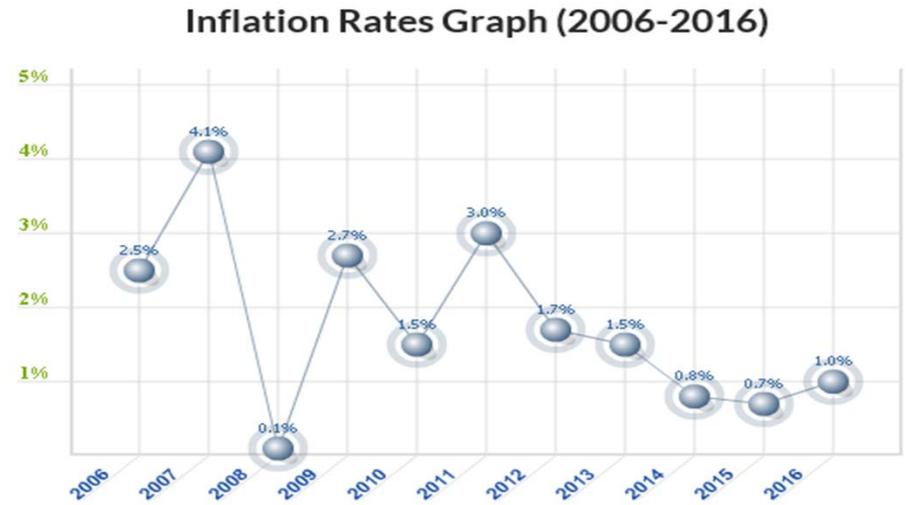


- ◆ Hyman Minsky (economist)
 - ◆ “Stability Breeds Instability”
 - ◆ Longer something is stable, the greater the instability, when the moment of instability occurs
 - ◆ Prosperity, Confidence, Speculation, Bust



(Just Another Pretty Face?)

Interest Rates → Where Do We Go From Here?



SHAPE AND SLOPE OF THE YIELD CURVE

Up 25bp, What's Next?

1. If Short-end Up?

Fed Continues Increasing FFs
50bp (2 times 2016 – "Dot plot")
Impact: NMD / CD Pricing

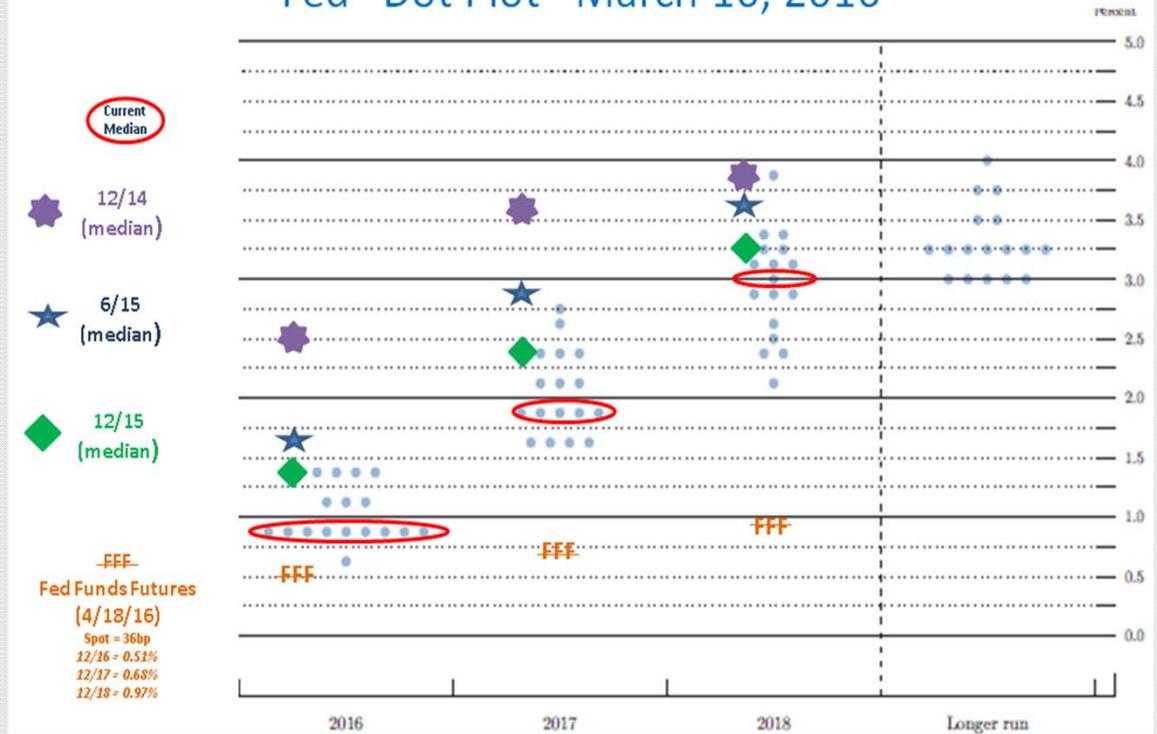
2. If Long-end Down?

OIL, China, Inflation, G7,
Stock Market and GDP
Impact: Loan Pricing and Pre-Payments
Impact: Investment Strategy

Presume a FLATTER Curve in 2016?

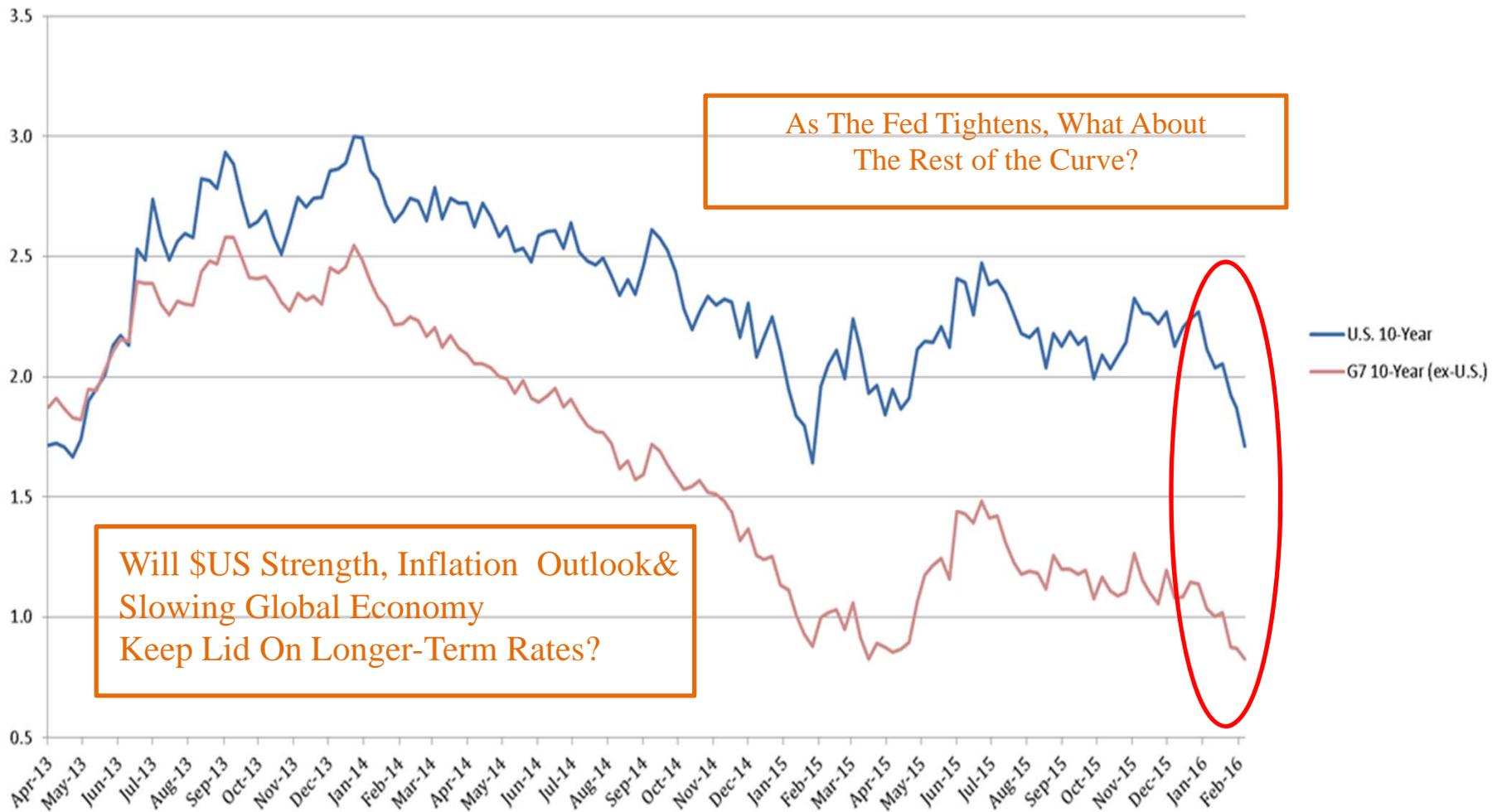
Strategies – flexible and nimble

Fed "Dot Plot" March 16, 2016



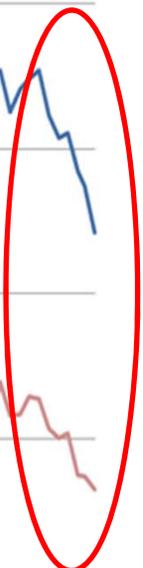
US vs. G7 (excluding US) 10 Year Debt

Global Bond Yields
U.S. 10-YEAR YIELD VS. AVG. G7 10-YEAR YIELD (ex-U.S.)



Will \$US Strength, Inflation Outlook & Slowing Global Economy Keep Lid On Longer-Term Rates?

As The Fed Tightens, What About The Rest of the Curve?



- ◆ Concerned about RISING Rates
 - However, earnings are now an issue, despite other metrics and earnings count!
- ◆ Questioning Deposit stability
 - Core vs. non-core
- ◆ Credit Union-specific Assumptions
 - Need to be defended
 - Static vs. Dynamic vs. Growth
- ◆ Aggressive growth in long-term assets (LT Asset/Assets)
- ◆ NEV (Biggest Issue/Misunderstanding among CUs and Examiners)
- ◆ STRESS testing a Must
 - IRR, Liquidity...Capital and Credit?
- ◆ Liquidity back at the forefront of discussions; Contingency Plans

◆ Focus = Rising Rates

(When? How Much? How Fast?)

**ARE YOU
PREPARED
FOR RISING
INTEREST
RATES?**



- ◆ Earnings at Risk – **Ramps**

- Static vs. Growth Model
- Parallel & Non-Parallel Shifts
- 1 Year vs. 5 Year

Upwards of 25-30
scenarios *each* quarter!
YIKES...which ones to focus on?

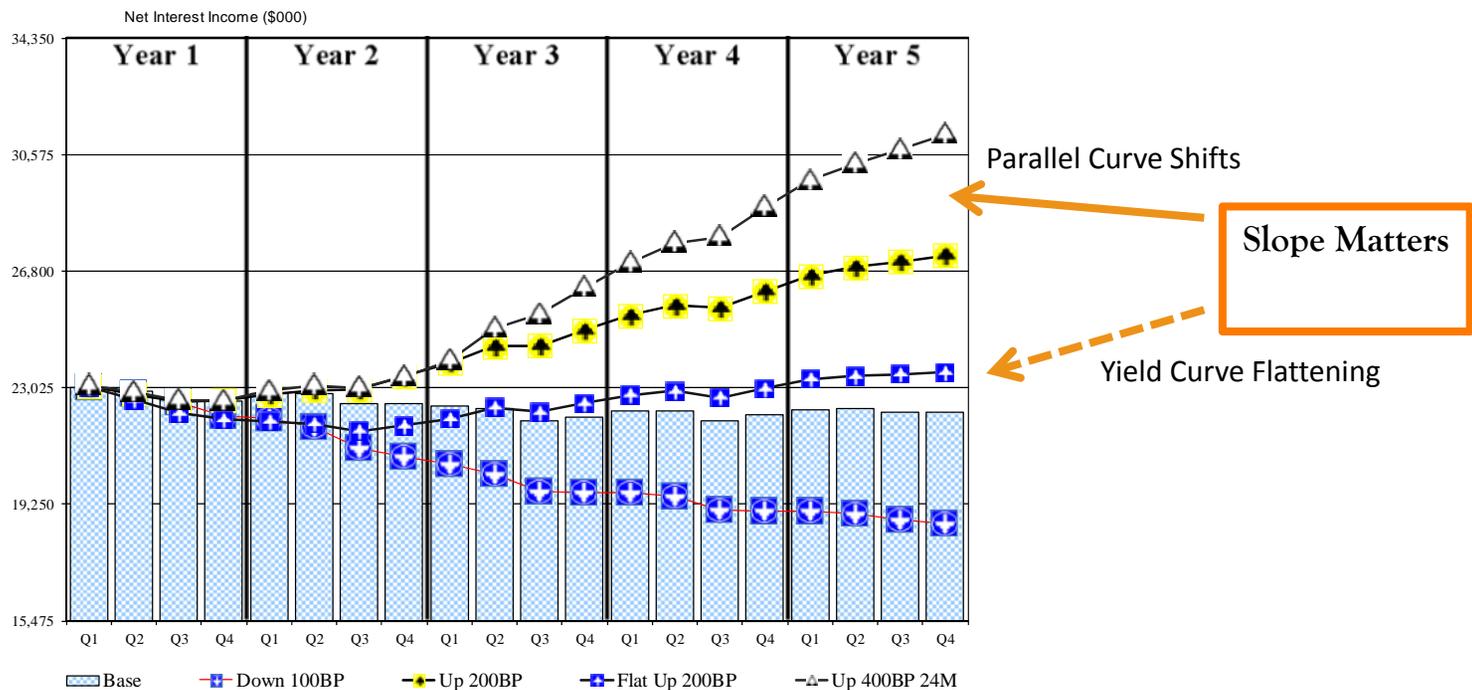
- ◆ Earnings at Risk – **Shocks**

- ◆ Earnings at Risk – Net Income (KEY) versus Value at Risk – NEV
- ◆ Stress Testing – NII, NEV
- ◆ Gap Reporting (1 year? Use as data base, look to >5 year...)
- ◆ Core Funding Utilization...poor man's surrogate for NEV, but powerful!

**What are the Core scenarios to focus on Making
Decisions and Developing Strategies?**

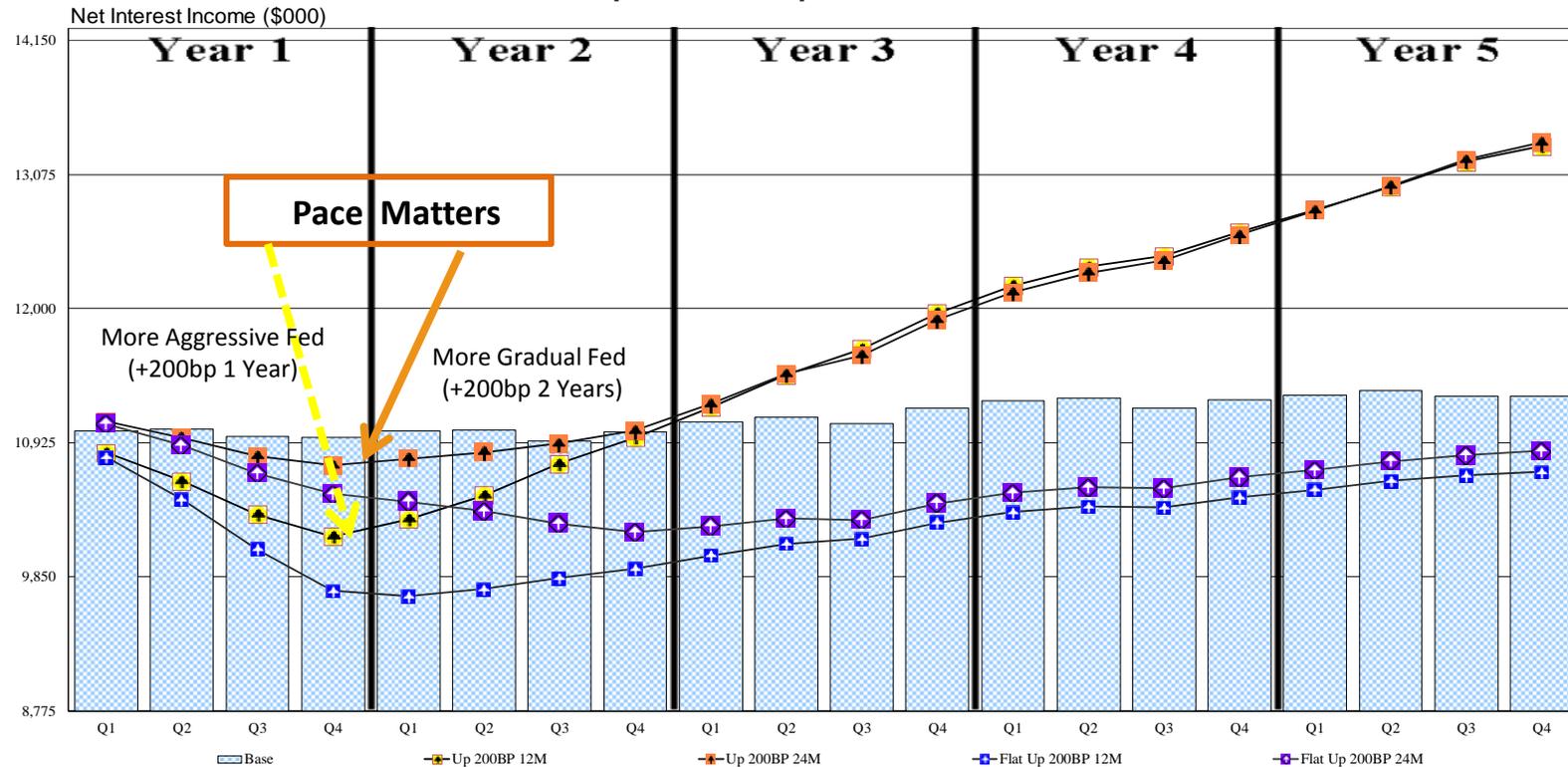
How Will The Long-End “Behave” As Fed Tightens?

BASE SIMULATION -ALTERNATIVE SCENARIOS

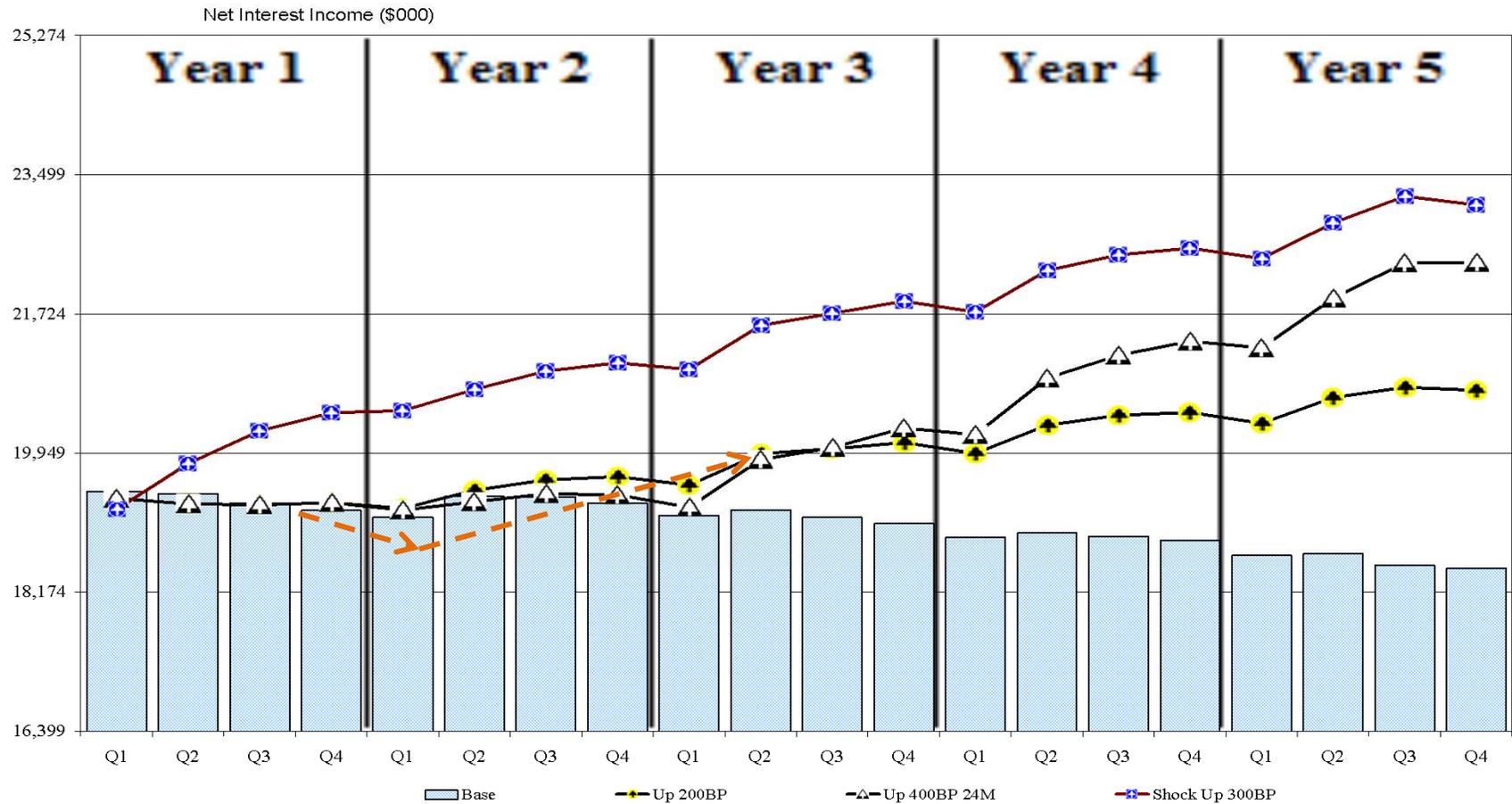


NII SUMMARY					
	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Flat Up 200BP</u>	<u>Up 400BP 24M</u>
Year-1 NII	90,562	91,191	91,103	89,894	91,230
Year-2 NII	85,655	90,642	92,121	87,221	92,442
Year-3 NII	80,054	88,855	97,455	89,157	100,541
Year-4 NII	77,194	88,613	102,806	91,418	111,585
Year-5 NII	75,368	89,110	108,016	93,694	121,993

How Fast Will The Fed Tighten?



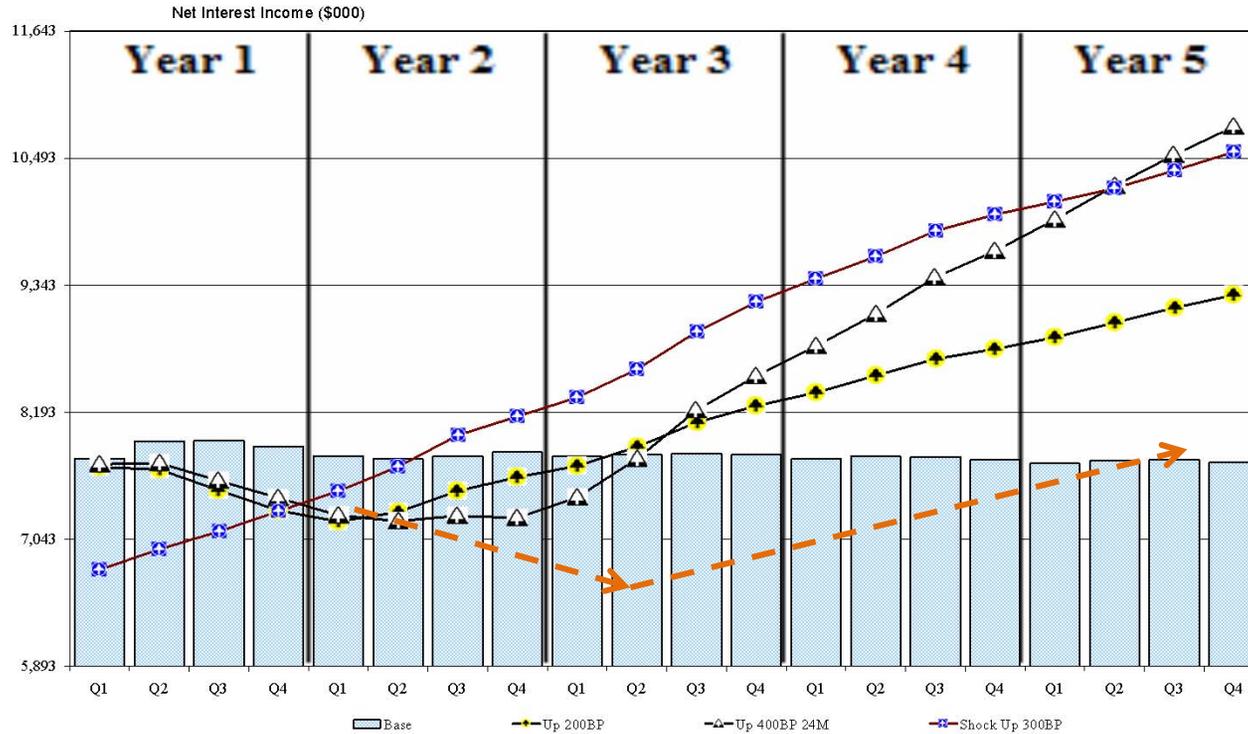
NII SUMMARY					
	<u>Base</u>	<u>Up 200BP 12M</u>	<u>Up 200BP 24M</u>	<u>Flat Up 200BP 12M</u>	<u>Flat Up 200BP 24M</u>
Year-1 NII	43,992	41,984	43,615	41,085	43,175
Year-2 NII	43,999	42,537	43,583	39,194	41,310
Year-3 NII	44,504	46,317	46,244	40,568	41,309
Year-4 NII	45,017	49,547	49,391	41,670	42,291
Year-5 NII	45,242	52,243	52,290	42,514	43,163



SHOCKS Can Be Misleading; Why Ramps Are Also Important

How Liability Sensitive (Shock vs. Ramps)?

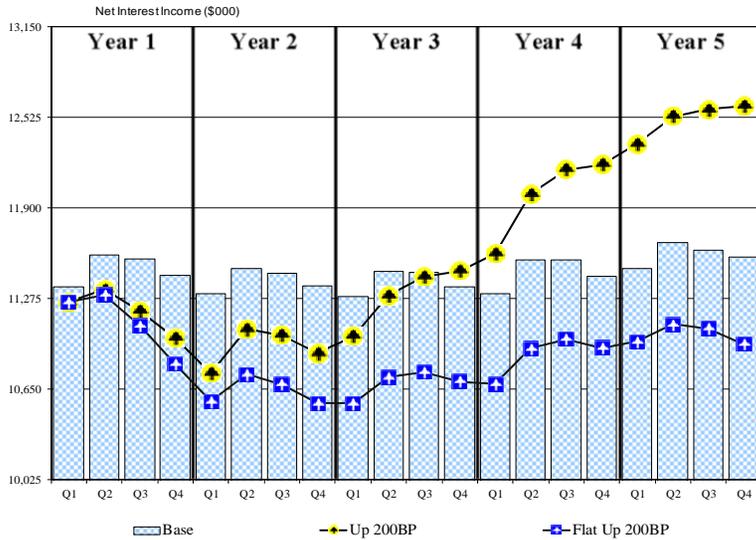
ALTERNATIVE SCENARIOS - SHOCK UP 300



NII SUMMARY				
	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Shock Up 300BP</u>
Year-1 NII	31,526	30,162	30,451	28,133
Year-2 NII	31,195	29,582	28,960	31,320
Year-3 NII	31,231	31,942	31,929	35,025
Year-4 NII	31,121	34,342	36,948	38,825
Year-5 NII	30,996	36,272	41,489	41,254

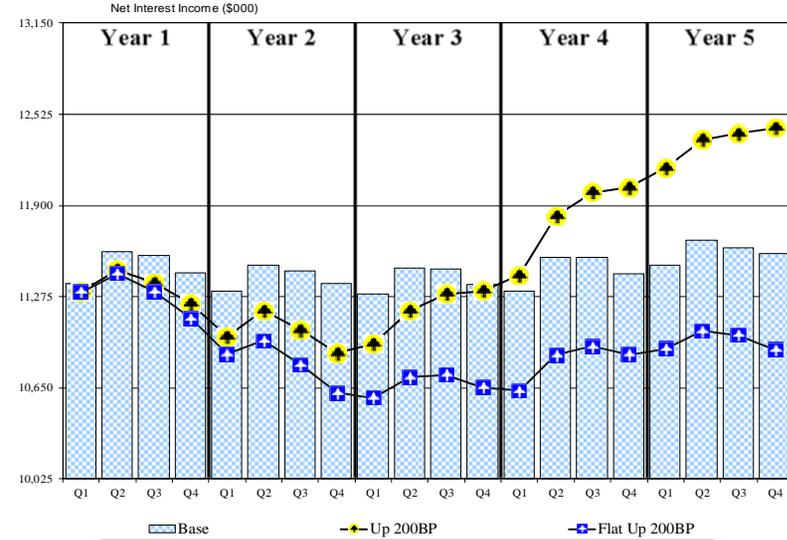
Alternative "Pace" of Rising Rates

Base Simulation as of 11/30/2015 - 12 Month Rate Movements



NII SUMMARY			
	<u>Base</u>	<u>Up 200BP</u>	<u>Flat Up 200BP</u>
Year-1 NII	45,923	44,782	44,462
Year-2 NII	45,605	43,746	42,553
Year-3 NII	45,567	45,210	42,760
Year-4 NII	45,823	47,950	43,551
Year-5 NII	46,319	50,066	44,109

Prolonged Rate Movements - 24 Months



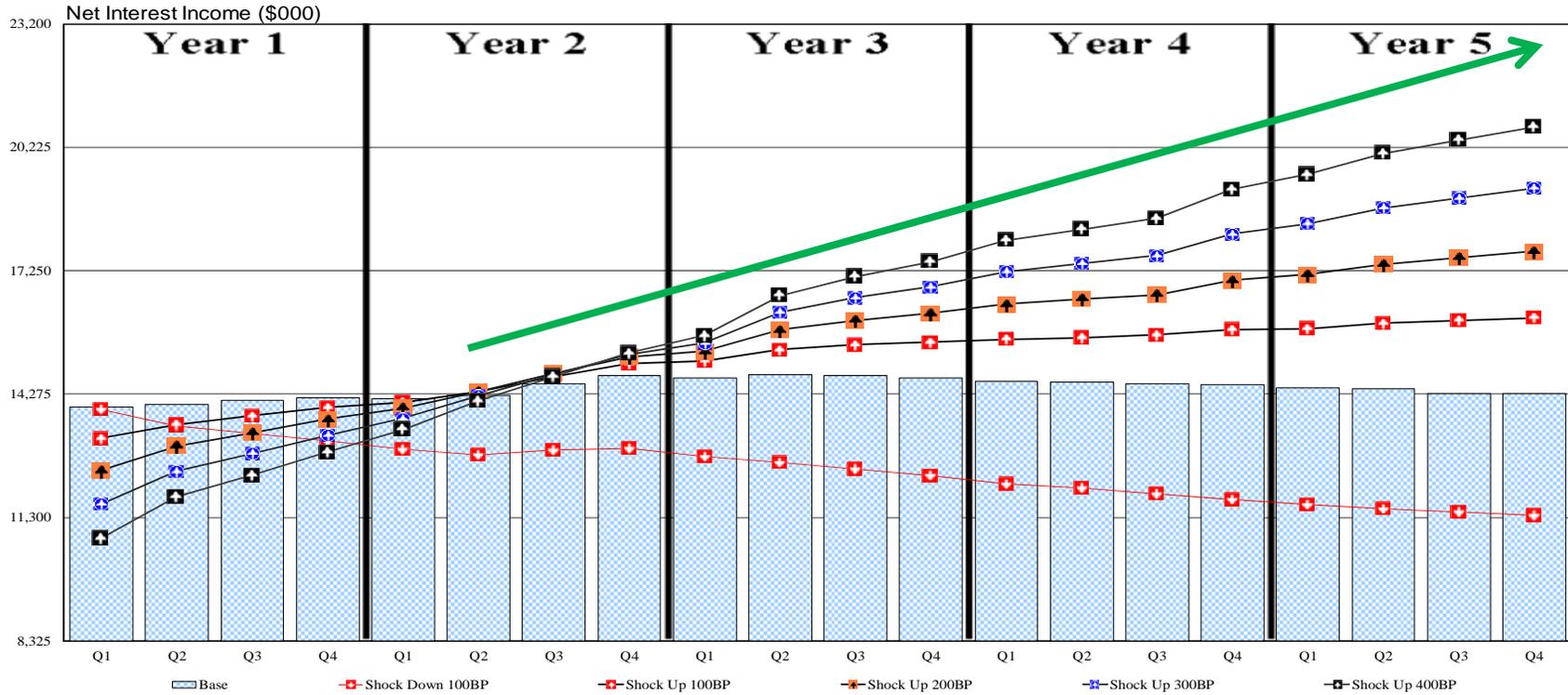
NII SUMMARY			
	<u>Base</u>	<u>Up 200BP</u>	<u>Flat Up 200BP</u>
Year-1 NII	45,923	45,362	45,174
Year-2 NII	45,605	44,108	43,279
Year-3 NII	45,567	44,730	42,689
Year-4 NII	45,823	47,260	43,312
Year-5 NII	46,319	49,330	43,872

	CHANGE / DIFFERENCE IN RESULTS		
	<u>Base</u>	<u>Up 200BP</u>	<u>Flat Up 200BP</u>
Year-1 NII	0	580	711
Year-2 NII	0	363	726
Year-3 NII	0	-480	-71
Year-4 NII	0	-690	-239
Year-5 NII	0	-736	-236

← Pace closer to "Forward" Curve

Parallel Rate Shocks (Instantaneous)

Shock Analysis



NII SUMMARY

	<u>Shock Down 100BP</u>	<u>Base</u>	<u>Shock Up 100BP</u>	<u>Shock Up 200BP</u>	<u>Shock Up 300BP</u>	<u>Shock Up 400BP</u>
Year-1 NII	53,876	56,311	54,447	52,461	50,158	47,786
Year-2 NII	51,631	57,649	58,098	58,226	57,908	57,481
Year-3 NII	50,177	58,787	61,406	63,394	65,207	66,902
Year-4 NII	47,728	58,162	62,754	66,684	70,388	73,943
Year-5 NII	45,893	57,387	63,988	69,827	75,381	80,754

Net Economic Value (NEV)

Don't Fall Victim to Fact vs. Fiction



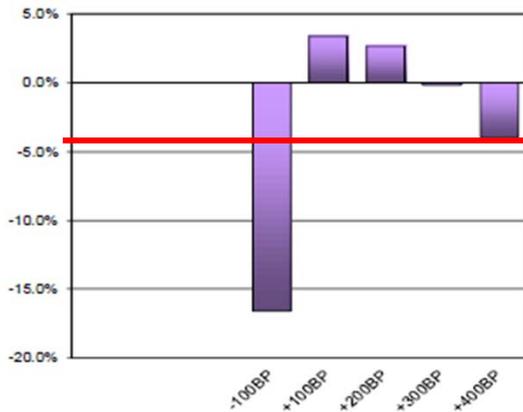
SAME CREDIT UNION – DIFFERENT RESULTS

NMDs = 5yr Avg. Life

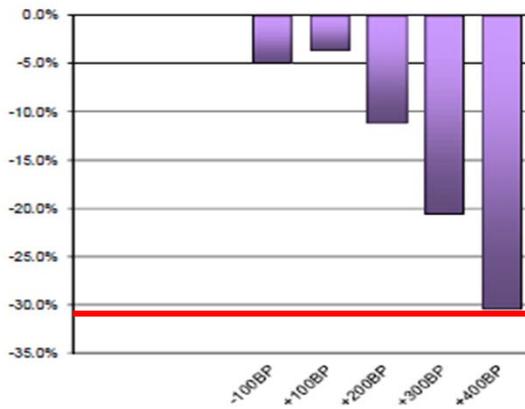
NMDs = 2.5yr Avg. Life

NMDs = "Par"

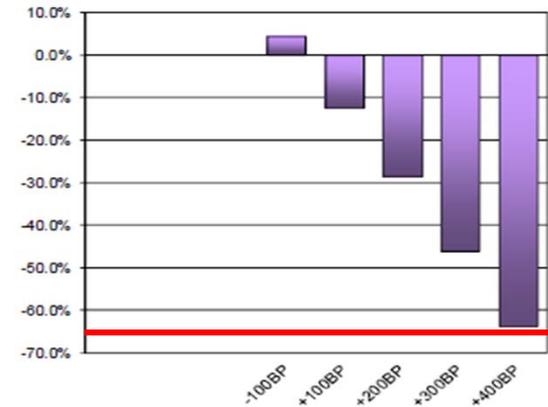
NEV (\$) - Pct. Chg from 0 Shock



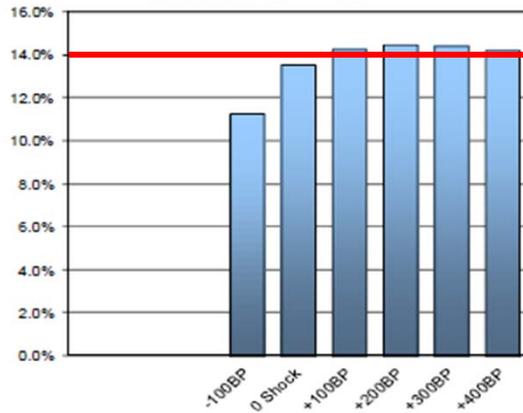
NEV (\$) - Pct. Chg from 0 Shock



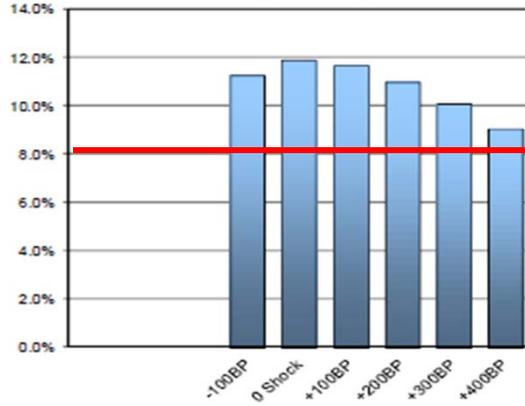
NEV (\$) - Pct. Chg from 0 Shock



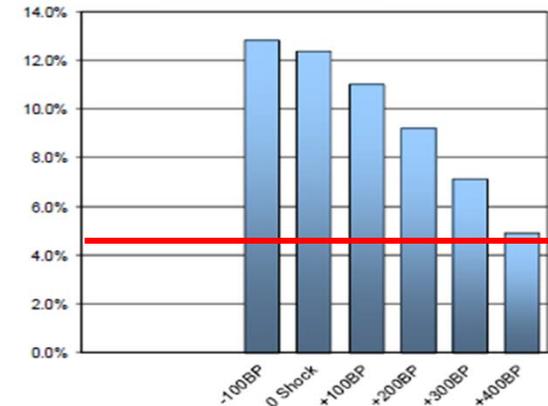
NEV Ratio (NEV/EVA)



NEV Ratio (NEV/EVA)



NEV Ratio (NEV/EVA)





Net Economic Value of Equity: How to use

RATE SHOCK SCENARIOS

	Book Value	-100BP	0 Shock	+100BP	+200BP	+300BP	+400BP
ASSETS							
Investments	350,847	354,720	350,847	343,653	335,506	327,260	319,184
Loans	331,852	344,317	339,155	330,285	322,718	315,951	309,608
Other Assets	10,526	10,526	10,526	10,526	10,526	10,526	10,526
TOTAL ASSETS (EVA)	693,225	709,563	700,528	684,464	668,750	653,737	639,317
% Chg from 0 Shock	-1.04%	1.29%		-2.29%	-4.54%	-6.68%	-8.74%
LIABILITIES							
Non Maturity Deposits	502,261	491,322	458,246	438,462	420,553	404,320	389,585
Time Deposits	108,772	109,815	109,071	107,944	106,841	105,762	104,706
Borrowings	0	0	0	0	0	0	0
Other Liabilities	4,642	4,642	4,642	4,642	4,642	4,642	4,642
TOTAL LIABILITIES (EVL)	615,675	605,780	571,959	551,048	532,036	514,724	498,933
% Chg from 0 Shock	7.64%	5.91%		-3.66%	-6.98%	-10.01%	-12.77%

\$55mm gain

NET ECONOMIC VALUE (NEV)	77,550	103,783	128,569	133,417	136,714	139,013	140,384
% Chg from 0 Shock <i>Policy Limits</i>		-19.3%	-10.0%	3.8%	6.3%	8.1%	9.2%
				-10.0%	-20.0%	-30.0%	-40.0%
NEV Ratio (NEV/EVA)	11.19%	14.63%	18.35%	19.49%	20.44%	21.26%	21.96%
BP Chg from 0 Shock		-373		114	209	291	361



Risk Summary Grid*				
Post Shock NEV/EVA Ratio	0 to 100bp	100 to 200bp	200 to 400bp	Over 400bp
Over 10%	Min. Risk -1	Min. Risk -1	MIN. RISK (1)	Mod. Risk -2
6.00% to 10.00%	Min. Risk -1	Min. Risk -1	Mod. Risk -2	Sig. Risk -3
4.00% to 6.00%	Min. Risk -1	Mod. Risk -2	Sig. Risk -3	High Risk -4
Below 4.00%	Mod. Risk -2	Sig. Risk -3	High Risk -4	High Risk -4

*Included for discussion purposes only. Grid evaluates +200/-100 scenarios for risk assessment.
*Current risk assessment for Risk Summary Grid is based on -100 scenario.

Average lives of non-maturity deposits are based upon DCG deposit study. The aggregate average life based upon the current deposit mix is 8.03 years.

Core Deposits Results



Core Funding Utilization Improving

INTEREST RATE SCENARIOS

	<u>Base</u>		<u>Down 100BP</u>		<u>Up 200BP</u>		<u>Up 400BP 24M</u>	
Assets (> 60 Months)	109,444		82,537		125,913		130,147	
Core Liabilities (> 60 Months)	Volume	Cumulative Excess	Volume	Cumulative Excess	Volume	Cumulative Excess	Volume	Cumulative Excess
Equity	77,550		77,550		77,550		77,550	
Other Liabilities	4,642		4,642		4,642		4,642	
DDA	67,702	40,450	67,702	67,357	67,702	23,981	67,702	19,747
Shares	187,885	228,335	187,885	255,242	187,885	211,866	187,885	207,632
	337,779		337,779		337,779		337,779	
% Utilization	32.4%		24.4%		37.3%		38.5%	

HISTORICAL ASSESSMENT

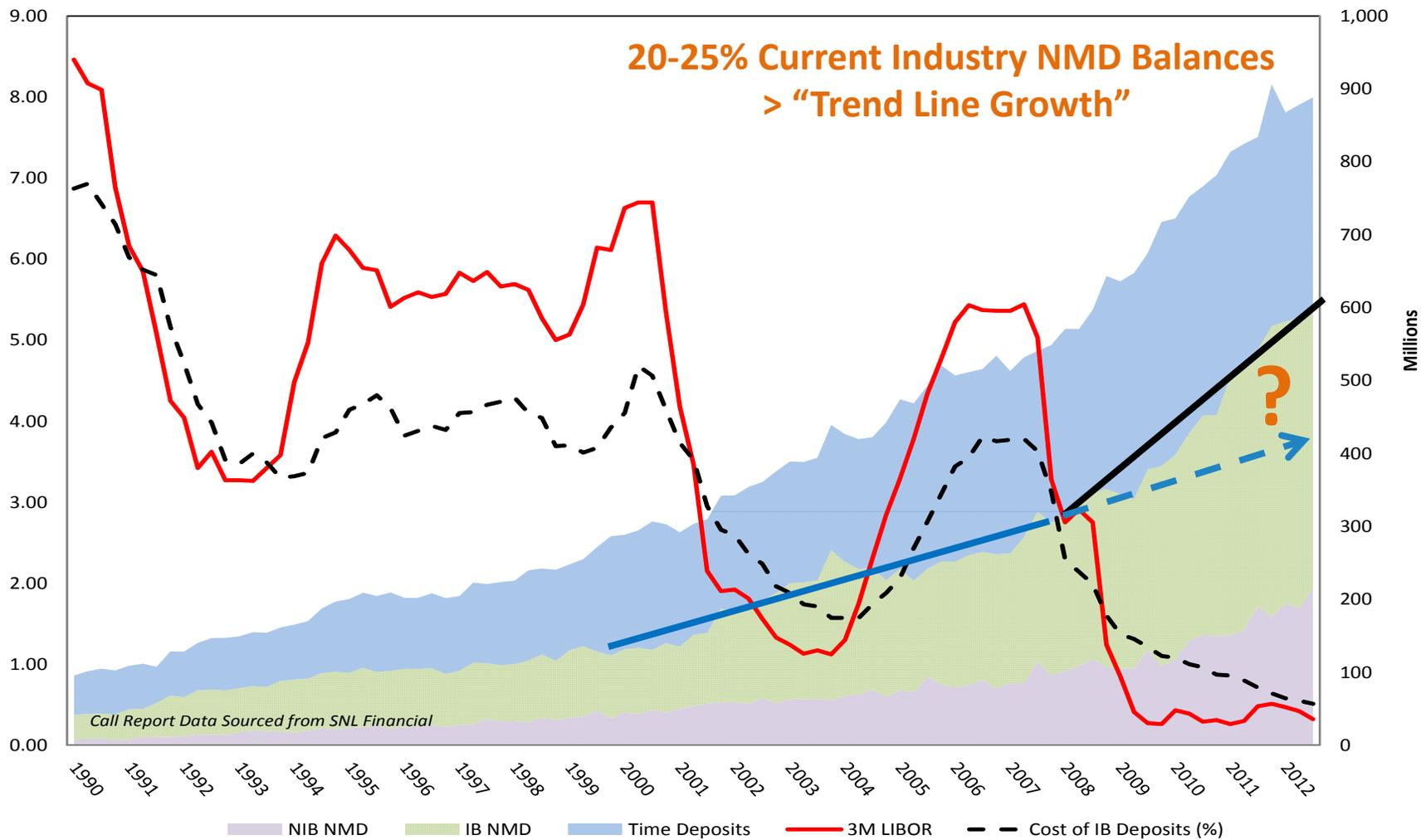
June 30, 2015	27.8%	20.5%	32.1%	33.5%
March 31, 2015	20.9%	14.8%	25.3%	26.2%
December 31, 2014	16.3%	11.4%	21.5%	22.1%
September 30, 2014	14.8%	11.0%	21.1%	21.6%

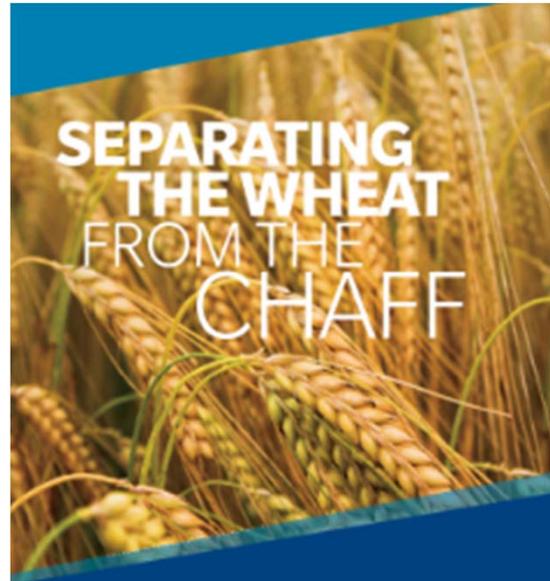
NOTE #1: Core funding utilization measures the long term structural position of the balance sheet (i.e. NEV simulation) and quantifies the degree to which the Credit Union utilizes long-term (i.e. >5-years) funding sources to support long-term assets. The cumulative excess may be used as an indicator of the Credit Union's capacity to add additional long-term assets.

Steep Curves, Flat Curves, Variable Curves

- Flatter yield curve = continued pressure on margins for most
- Key variable: Pace of Fed Tightening
- **Important Q:** Depositor Behavior as Fed Raises Rates?

Deposit Mix





Deposit Pricing Discipline & Strategy *Key Business Issues*

Marginal Cost of Funds Example

MMDA

BALANCE: \$50,000

CURRENT RATE: 0.35%

		RATE INCREASE		
		0.25%	0.50%	1.00%
RUNOFF PROTECTED	10.00%	2.85%	5.35%	10.35%
	20.00%	1.60%	2.85%	5.35%
	30.00%	1.18%	2.02%	3.68%

Annualized NII Impact (000s) (\$125) (\$250) (\$500)

Liquidity a factor in deposit initiatives

Marginal Cost of Funds Example

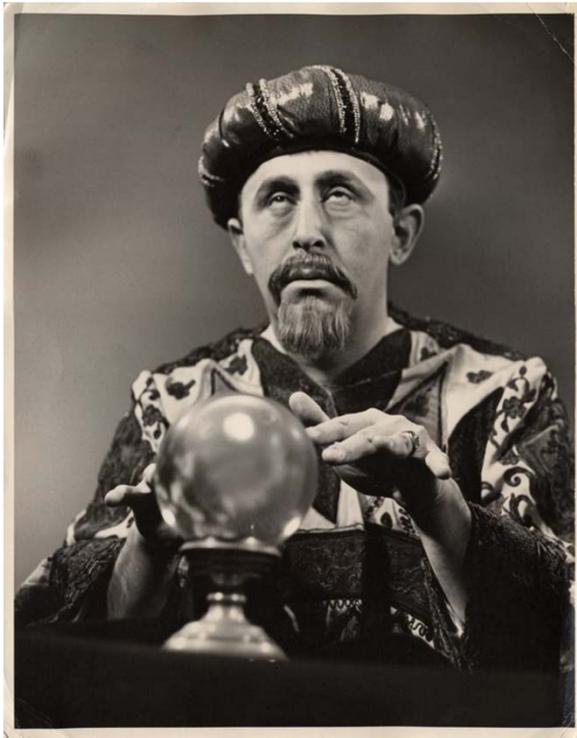
*A promotion with 30% Conversion requires
\$6.75 million of growth at 2% spread to break-even*

	<u>Balance</u>	<u>Rate</u>	<u>Ann. Int. Expense</u>	<u>Cost of Conversion</u>	<u>Required Growth Offset</u>		
<i>Existing Savings/MM</i>							
<i>DA base:</i>	50,000	0.350%	175				
<i>Promotional / Defensive 7 Month CD</i>							
<i>Rate:</i>		1.250%					
					Spread Assumed on Growth		
					<u>2%</u>	<u>3%</u>	<u>4%</u>
<i>Cost of Conversion:</i>							
	<u>% Converted</u>						
	10%	0.440%	220	45	2,250	1,500	1,125
	20%	0.530%	265	90	4,500	3,000	2,250
	30%	0.620%	310	135	6,750	4,500	3,375
	40%	0.710%	355	180	9,000	6,000	4,500
	50%	0.800%	400	225	11,250	7,500	5,625

HOW CORE ARE MY DEPOSITS?

&

What Should I Do To Better Understand
Potential Ramifications?





Liability Pricing: Mirror, Mirror on the Wall*

Term	Reg.	CDA
1 wk	0.54	
2 wk	0.56	
3 wk	0.57	
1 mo	0.58	
2 mo	0.61	
3 mo	0.65	
4 mo	0.67	
5 mo	0.68	
6 mo	0.69	
9 mo	0.75	
1 yr	0.88	0.79
2 yr	1.29	1.07
3 yr	1.48	1.27
4 yr	1.69	1.47
5 yr	1.87	1.66
6 yr	2.08	1.86
7 yr	2.26	2.03

✓ Consider Dividend Impact @ est. 3.50% (x 1/20th of spread between advance rate and dividend rate).
 $(3.50\% - .58\% = 2.92\%) \times (1/20^{\text{th}} \text{ stock req.}) = @ 15\text{bps!}$

✓ No NCUA Insurance premium (6bps)

✓ No operational costs or “cannibalization”

✓ “Least” expensive source of funds at the margin

SO, WHAT GETS IN THE WAY of Borrowing?
 (a rhetorical question...I’ve heard it all)

*article written for FHLB’s on effective use of wholesale funding....read it and share it with Board! Email Frank for copy or ask your RM

What CAMEL rating would you give this CU?

BALANCE SHEET COMPARISON

	<u>2/29/2016</u>			<u>11/30/2015</u>			<u>CHANGE</u> <u>Current vs. Prior</u>			<u>2/28/2015</u>		
	<u>Balance</u>	<u>Rate</u>	<u>% of Assets</u>	<u>Balance</u>	<u>Rate</u>	<u>% of Assets</u>	<u>Balance</u>	<u>Rate</u>	<u>% of Assets</u>	<u>Balance</u>	<u>Rate</u>	<u>% of Assets</u>
Investments	91,126	1.68	10%	93,965	1.58	10%	-2,839	0.10	-1%	77,168	1.53	10%
Loans	786,264	3.93	83%	748,178	3.93	83%	38,086	0.00	0%	635,600	3.76	83%
Other Assets	64,425	0.00	7%	58,894	0.00	7%	5,531	0.00	0%	53,604	0.00	7%
Total Assets	941,815	3.44	100%	901,037	3.43	100%	40,778	0.02	5%	766,372	3.27	100%
Non-Maturity Deposits	551,345	0.11	59%	511,357	0.11	57%	39,988	0.00	2%	492,887	0.09	64%
Time Deposits	205,063	0.84	22%	220,996	0.95	25%	-15,933	-0.11	-3%	195,101	0.72	25%
Brokered Deposits	39,928	1.03	4%	27,253	0.98	3%	12,675	0.05	1%	0	0.00	0%
Borrowings	62,918	0.92	7%	57,130	0.71	6%	5,788	0.21	0%	2,261	0.25	0%
Other Liabilities	9,626	0.00	1%	10,230	0.00	1%	-604	0.00	0%	9,710	0.00	1%
Equity	72,935	0.00	8%	74,071	0.00	8%	-1,136	0.00	0%	66,413	0.00	9%
Total Liabilities & Equity	941,815	0.35	100%	901,037	0.37	100%	40,778	-0.02	5%	766,372	0.24	100%
BALANCE SHEET SPREAD		3.09			3.06			0.03			3.03	



SAME Credit Union with EARNINGS...CAMEL 1!

NET INTEREST INCOME SENSITIVITY

	<u>2/29/2016</u>		<u>11/30/2015</u>		<u>CHANGE</u> <u>Current vs. Prior</u>		<u>2/28/2015</u>	
Year 1 NII Projections								
Down 100BP	28,577	-2.15%	27,490	-2.11%	1,087	-0.05%	22,831	-1.99%
Base	29,206		28,082		1,124		23,295	
Up 200BP	28,215	-3.40%	27,015	-3.80%	1,200	0.40%	22,430	-3.71%
Year 2 NII Projections								
Down 100BP	26,796	-8.25%	25,922	-7.69%	874	-0.56%	20,996	-9.87%
Base	29,563	1.22%	28,538	1.62%	1,025		23,489	0.83%
Up 200BP	27,993	-4.16%	27,281	-2.85%	712	-1.30%	23,519	0.96%
2-Year Cumulative NII Projections								
Down 100BP	55,373	-5.78%	53,412	-5.67%	1,961	-0.11%	43,827	-6.32%
Base	58,769		56,620		2,149		46,784	
Up 200BP	56,208	-4.36%	54,296	-4.10%	1,912	-0.25%	45,949	-1.78%

90-Day LOOKBACK	<u>2/29/2016</u>		<u>11/30/2015</u>		<u>8/31/2015</u>		<u>5/31/2015</u>		<u>2/28/2015</u>	
Prior 3 Mths' NII Projections (last review)	6,916		6,639		6,309		5,807		5,419	
Prior 3 Mths' NII Actuals	7,147		6,790		6,442		5,963		5,481	
Variance (\$000's and %)	-231	-3.23%	-151	-2.22%	-133	-2.06%	-156	-2.62%	-62	-1.13%
360-Day LOOKBACK										
Prior 12 Mths' NII Projections	25,671		24,174		22,795		21,509		20,556	
Prior 12 Mths' NII Actuals	26,342		24,676		23,139		21,757		20,561	
Variance (\$000's and %)	-671	-2.55%	-502	-2.03%	-344	-1.49%	-248	-1.14%	-5	-0.02%

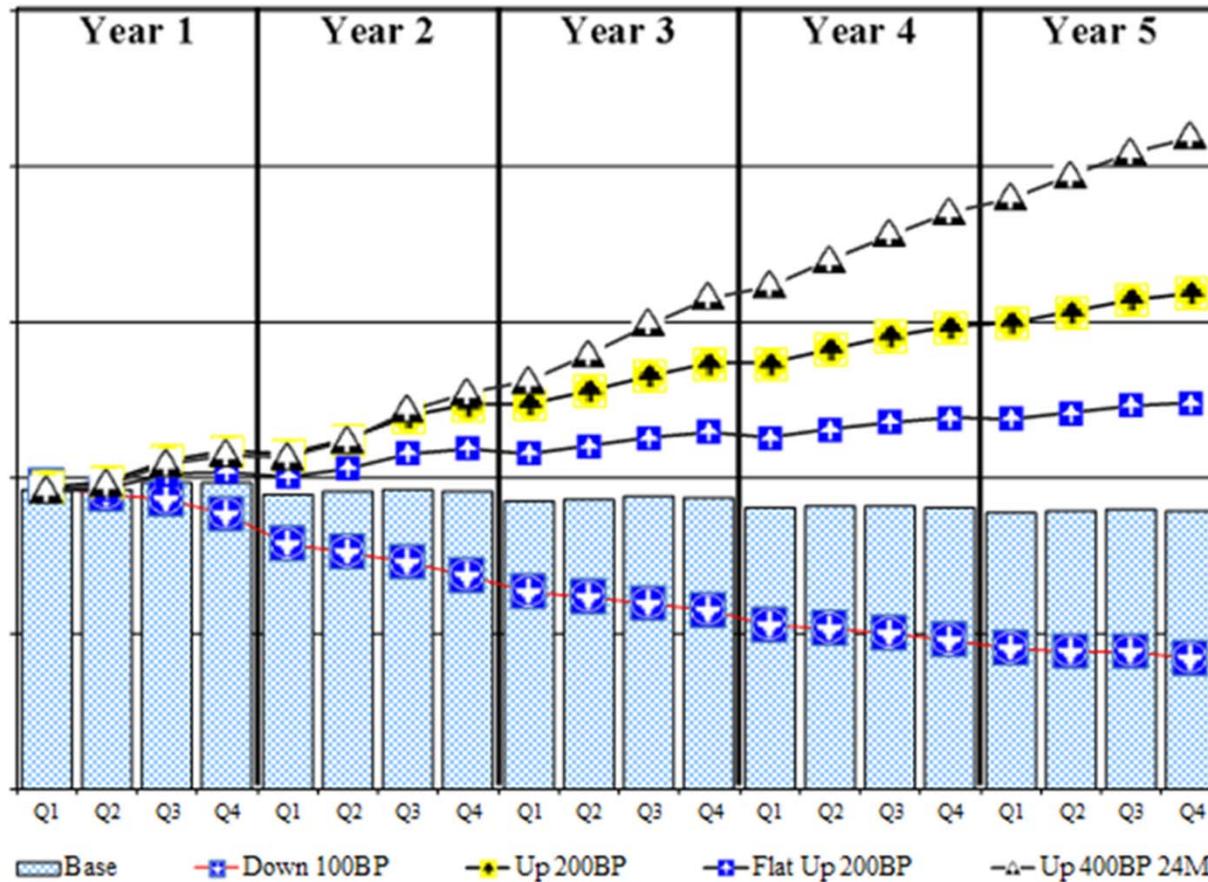
Note #1: Variance as of 2/29/2016 is due primarily to a \$148K annual dividend from the investment in PSCISCO/PSCU.

Strategies For All Shapes and Sizes

“NO One Size Fits All Strategy”

BASE SIMULATION -ALTERNATIVE SCENARIOS

Net Interest Income (\$000)

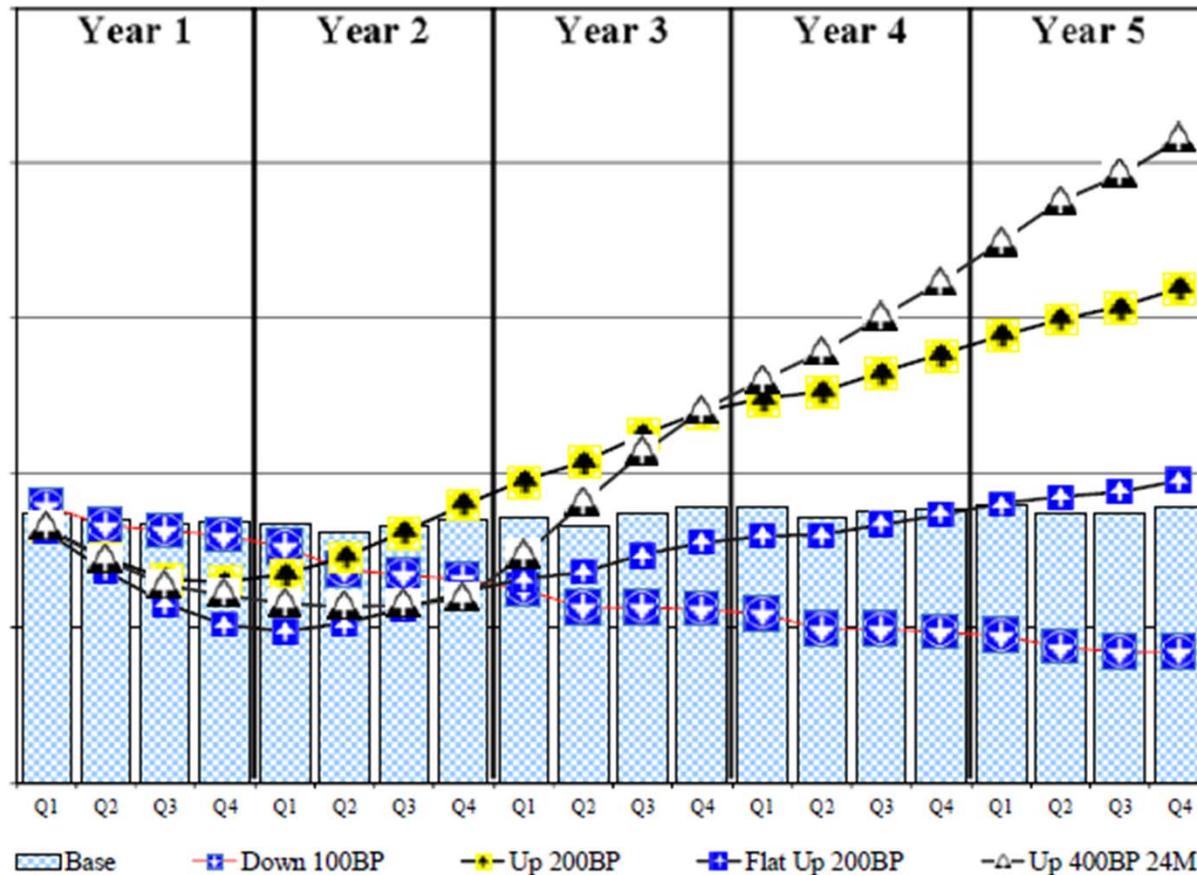


Consider:

- ◆ Understand capacity to extend assets
- ◆ Extend cash
- ◆ Mismatched leverage
- ◆ Hold fixed rate mortgages
- ◆ Flexibility with commercial/business deals and structures

BASE SIMULATION -ALTERNATIVE SCENARIOS

Net Interest Income (\$000)



Consider:

- ◆ Understand magnitude of exposure
- ◆ More fearful of rising or falling rates?
- ◆ If extending: how much insurance and how far out on the curve?
- ◆ Deposit pricing game plan
- ◆ Shorten assets?

Investment Strategy (not getting easier)

*Danger, Danger
Will Robinson!*

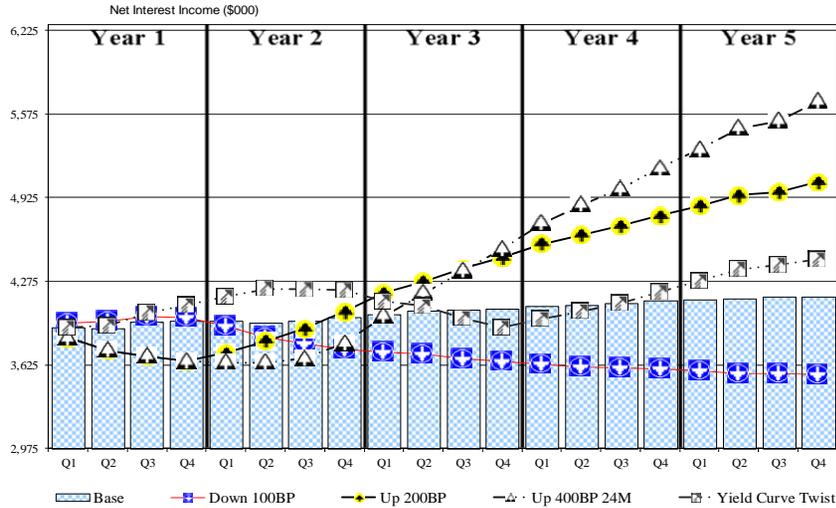


- Avoid CASH build up
- AVOID CALLABLE BONDS
- BEWARE High PREMIUMS
- CMO's? Better Do homework!!!
- Compare to Loans (incl. 30 yr FR)
- Pre-Invest 2016 CF if slow loans!?
- Extension Risk Concerns?:
Can we support?
- Key Q: If not loan demand, how to offset Margin Compression? Earnings? Consider Impact on IRR, NEV and NII

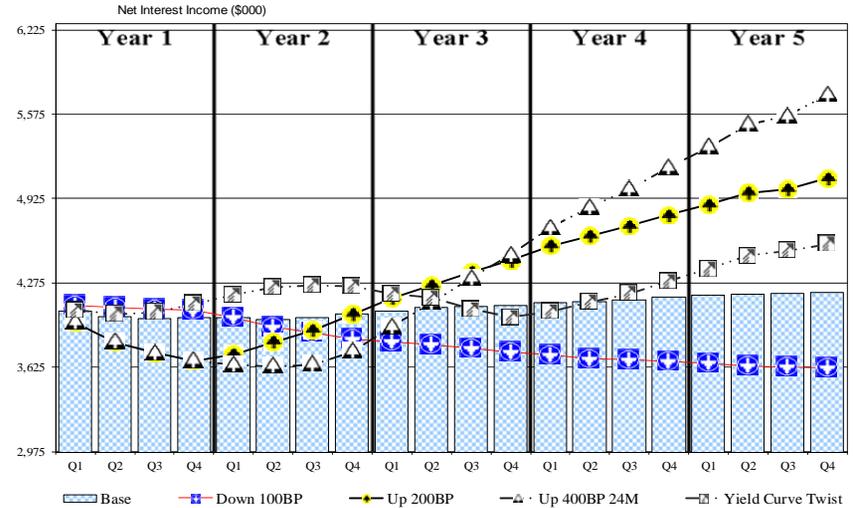


Pre-investment Cash Flows to MBS @ 2.32%

Base Simulation as a



\$35MM Pre-Investment Strategy



NII SUMMARY

	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Yield Curve Twist</u>
Year-1 NII	15,897	15,730	14,911	14,911	15,956
Year-2 NII	15,300	15,861	15,472	14,748	16,787
Year-3 NII	14,756	16,161	17,284	17,062	16,098
Year-4 NII	14,431	16,383	18,689	19,741	16,313
Year-5 NII	14,237	16,577	19,826	21,958	17,489

NII SUMMARY

	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Yield Curve Twist</u>
Year-1 NII	16,326	16,101	15,200	15,200	16,265
Year-2 NII	15,687	16,065	15,494	14,671	16,936
Year-3 NII	15,133	16,364	17,223	16,863	16,434
Year-4 NII	14,766	16,586	18,714	19,723	16,671
Year-5 NII	14,533	16,780	19,927	22,099	17,970

CHANGE / DIFFERENCE IN RESULTS

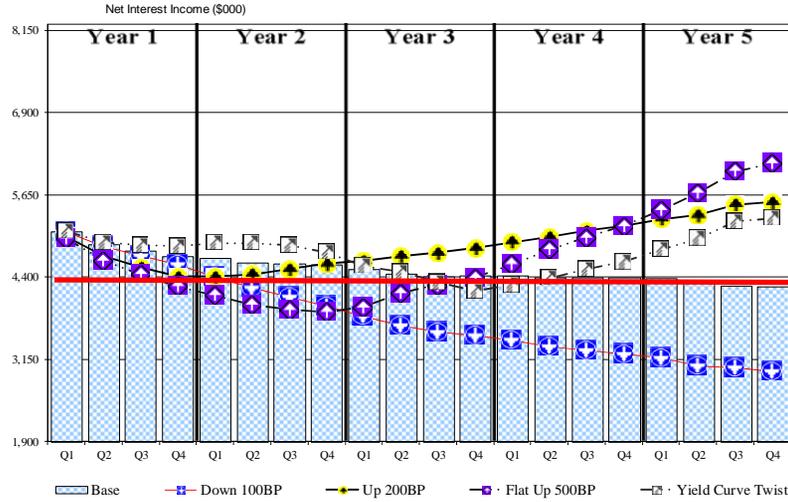
	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Yield Curve Twist</u>
Year-1 NII	429	371	289	289	309
Year-2 NII	387	203	21	-76	150
Year-3 NII	378	203	-61	-198	336
Year-4 NII	334	203	25	-18	358
Year-5 NII	296	203	101	141	481

Pre-invest \$35MM into a 15 Yr MBS at 2.32% and funded with overnight borrowings. The overnight borrowings are paid down with investment cash flow.

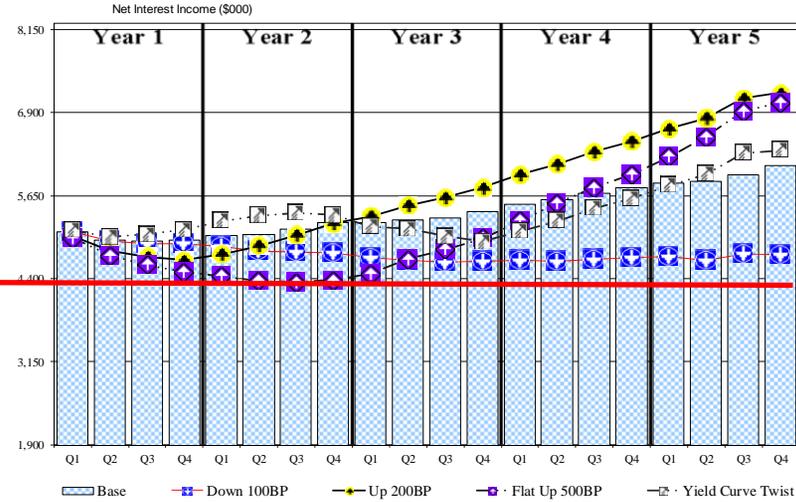


Short Term "Investment" Cash Flow into *Loans*

Base Simulation as of 9/30/2013



Alt Investment Cash Flow Assumption - Loans

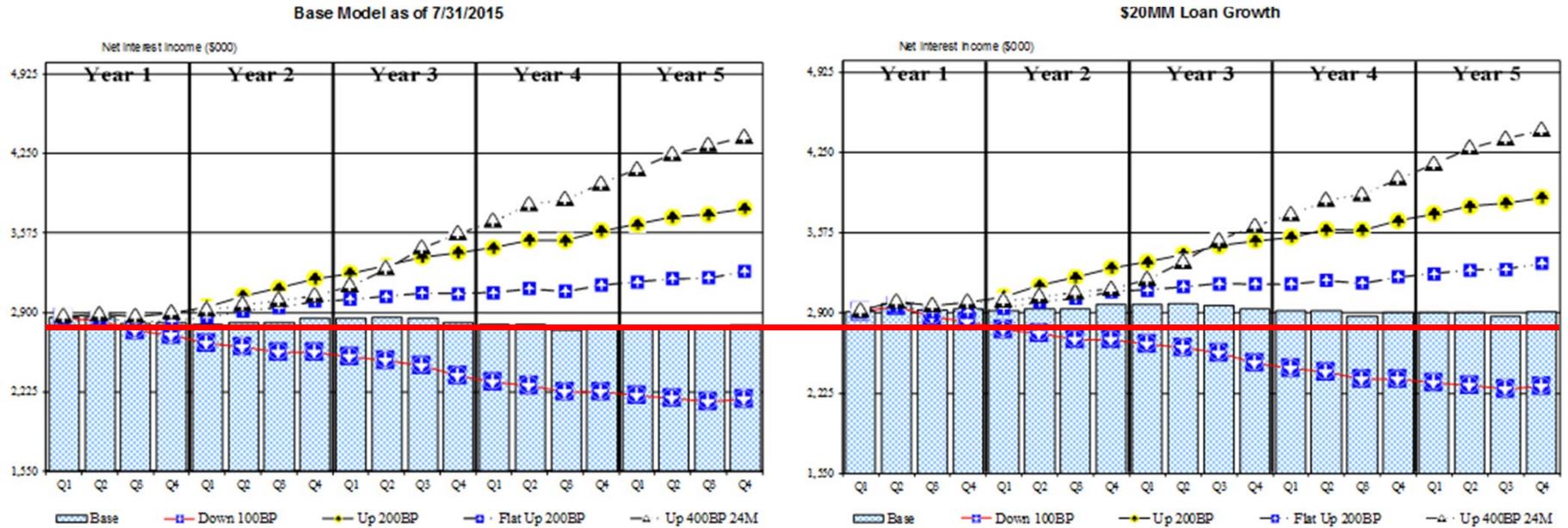


NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 500BP	Yield Curve Twist
Year-1 NII	19,254	19,478	18,679	18,330	19,775
Year-2 NII	16,686	18,461	17,968	15,871	19,486
Year-3 NII	14,544	17,766	18,969	16,774	17,540
Year-4 NII	13,295	17,574	20,226	19,596	17,815
Year-5 NII	12,205	17,184	21,659	23,230	20,332

NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 500BP	Yield Curve Twist
Year-1 NII	19,934	20,079	19,270	18,869	20,359
Year-2 NII	19,292	20,547	19,963	17,529	21,363
Year-3 NII	18,697	21,286	22,238	19,011	20,327
Year-4 NII	18,753	22,620	24,887	22,550	21,461
Year-5 NII	18,956	23,812	27,785	26,741	24,411

CHANGE / DIFFERENCE IN RESULTS					
	Down 100BP	Base	Up 200BP	Flat Up 500BP	Yield Curve Twist
Year-1 NII	680	601	590	538	584
Year-2 NII	2,606	2,087	1,995	1,658	1,877
Year-3 NII	4,152	3,521	3,268	2,237	2,787
Year-4 NII	5,458	5,046	4,661	2,954	3,647
Year-5 NII	6,752	6,628	6,126	3,511	4,079

NOTE: In the base simulation, all investment cash flow is assumed to roll into a blend of 2-5 year Agencies and Investment CDs. This alternative simulation assumes that all investment cash flow will fund 30 Yr Residential mortgages @ 4.25%.



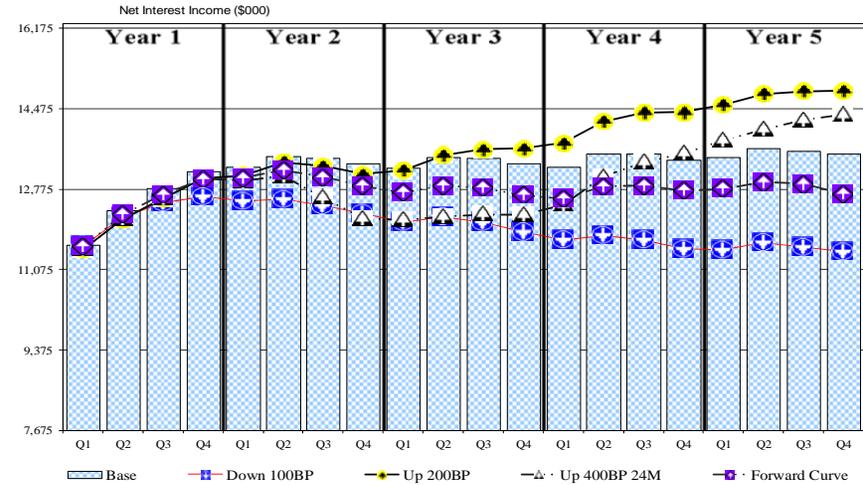
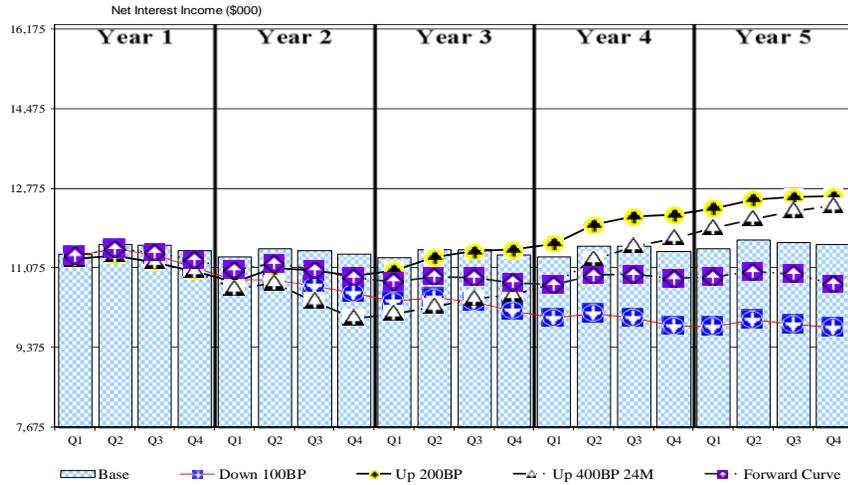
- ◆ \$20MM Loan Growth (combination of ARMs & Long Term Loans)
 - ◆ Funded \$10MM Bond CF, \$5MM ST FHLB, \$5MM 3Yr FHLB
- Question: Do we need term borrowings? NO, but feels better for some



1 Year Growth Model: \$232 Million

Base Simulation as of 11/30/2015

Growth Model



NII SUMMARY					
	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Forward Curve</u>
Year-1 NII	45,240	45,923	44,782	44,793	45,439
Year-2 NII	42,873	45,605	43,746	41,734	44,096
Year-3 NII	41,299	45,567	45,210	41,247	43,283
Year-4 NII	39,926	45,823	47,950	45,215	43,404
Year-5 NII	39,461	46,319	50,066	48,738	43,536

NII SUMMARY					
	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Forward Curve</u>
Year-1 NII	48,841	49,870	49,218	49,230	49,442
Year-2 NII	49,792	53,477	52,750	50,734	52,059
Year-3 NII	48,190	53,439	53,919	48,774	50,997
Year-4 NII	46,699	53,695	56,742	52,353	50,997
Year-5 NII	46,161	54,217	59,037	56,419	51,254

CHANGE / DIFFERENCE IN RESULTS					
	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Up 400BP 24M</u>	<u>Forward Curve</u>
Year-1 NII	3,602	3,947	4,437	4,437	4,003
Year-2 NII	6,920	7,872	9,004	9,000	7,963
Year-3 NII	6,890	7,872	8,708	7,527	7,714
Year-4 NII	6,773	7,872	8,793	7,139	7,593
Year-5 NII	6,700	7,897	8,971	7,681	7,718

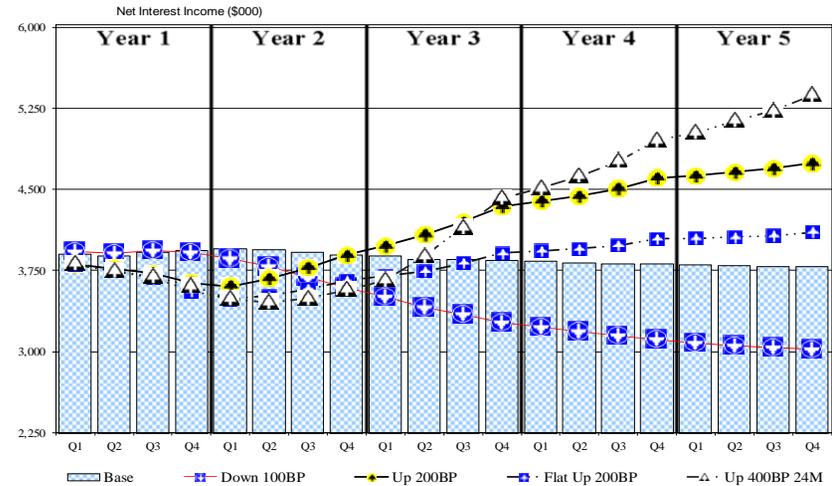
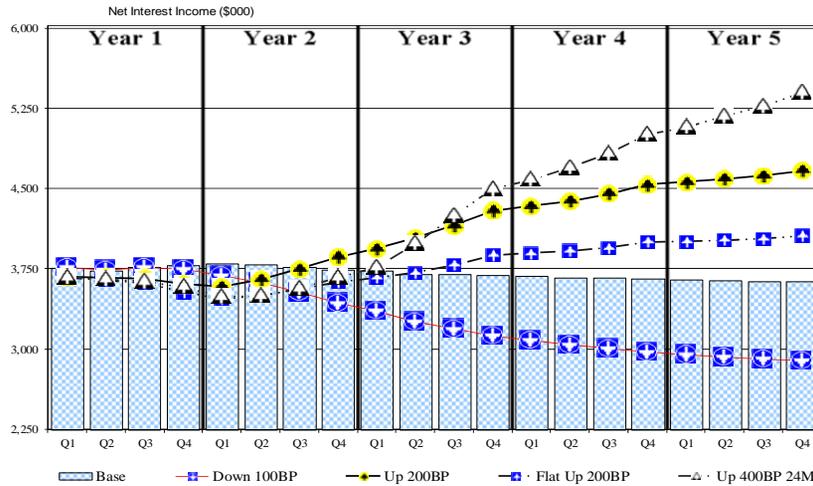
Assumes \$232 million of asset growth over the next 12 months: CRE: \$140MM, C&I: \$75MM, CRE Construction: \$9MM, and Agencies: \$64MM. Growth funded by the following: DDA: \$20MM, MMDA: \$88MM, TD: \$151MM, and FRB Cash: \$52MM (assumes \$44MM of NOW and Savings outflows). Note: \$52MM of Agency purchases with cash is captured as subsequent activity in the base simulation.



\$30MM Investment From Cash

Base Simulation as of 3/31/2015

\$30 million MBS purchase



NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	15,016	15,012	14,608	14,465	14,534
Year-2 NII	14,264	15,078	14,839	14,156	14,223
Year-3 NII	12,923	14,809	16,426	15,049	16,481
Year-4 NII	12,103	14,655	17,711	15,759	19,111
Year-5 NII	11,663	14,541	18,438	16,108	20,915

NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	15,689	15,656	14,931	14,781	14,856
Year-2 NII	14,919	15,722	14,950	14,234	14,007
Year-3 NII	13,527	15,453	16,601	15,163	16,106
Year-4 NII	12,666	15,299	17,943	15,906	18,853
Year-5 NII	12,194	15,184	18,721	16,283	20,759

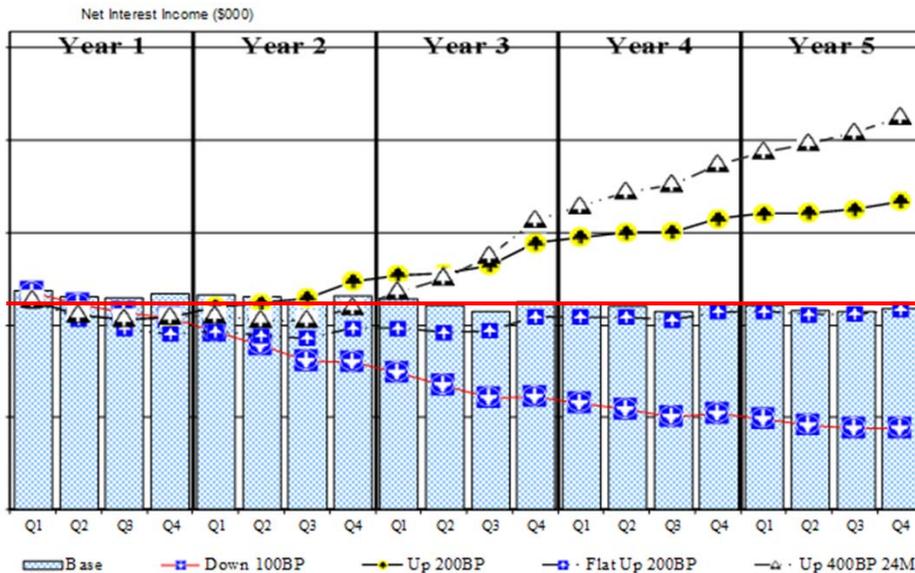
CHANGE / DIFFERENCE IN RESULTS					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	674	644	323	316	322
Year-2 NII	655	644	111	78	-217
Year-3 NII	604	644	175	114	-375
Year-4 NII	563	644	232	147	-259
Year-5 NII	530	644	283	175	-156

Redeploy \$30 million of cash @ 0.25% into 15 year MBS pool @ 2.40%

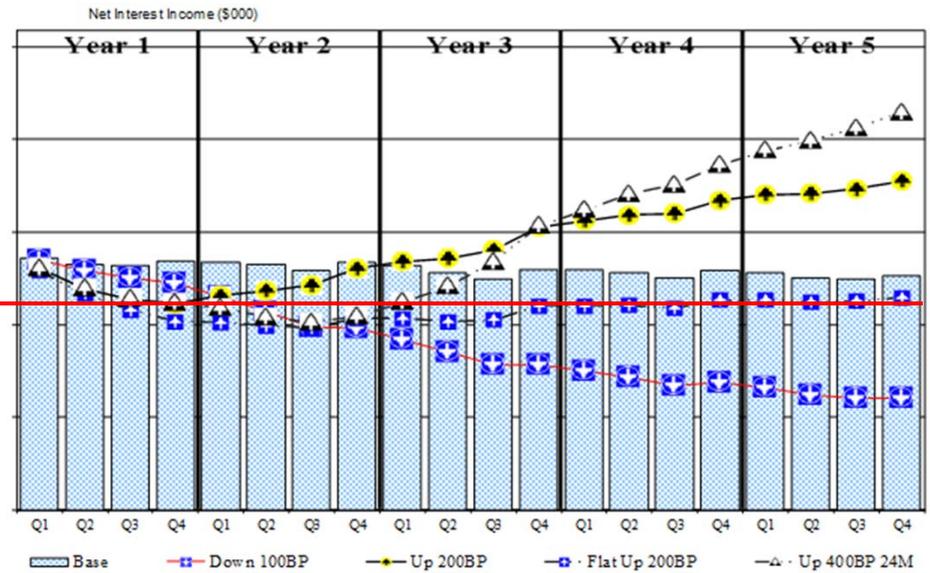


Extend \$30MM Cash into Mortgages & MBS

Base Simulation



Combined Cash Deployment

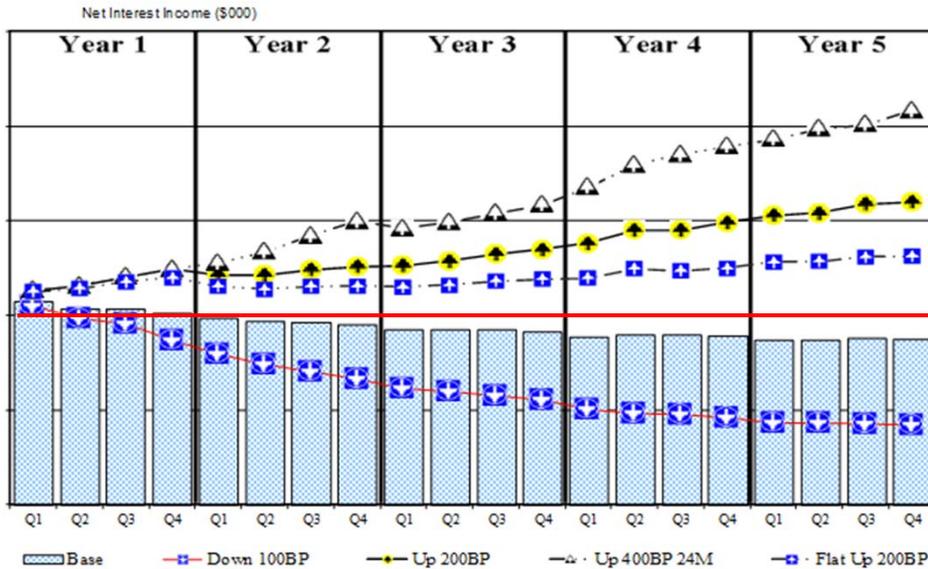


CHANGE / DIFFERENCE IN RESULTS

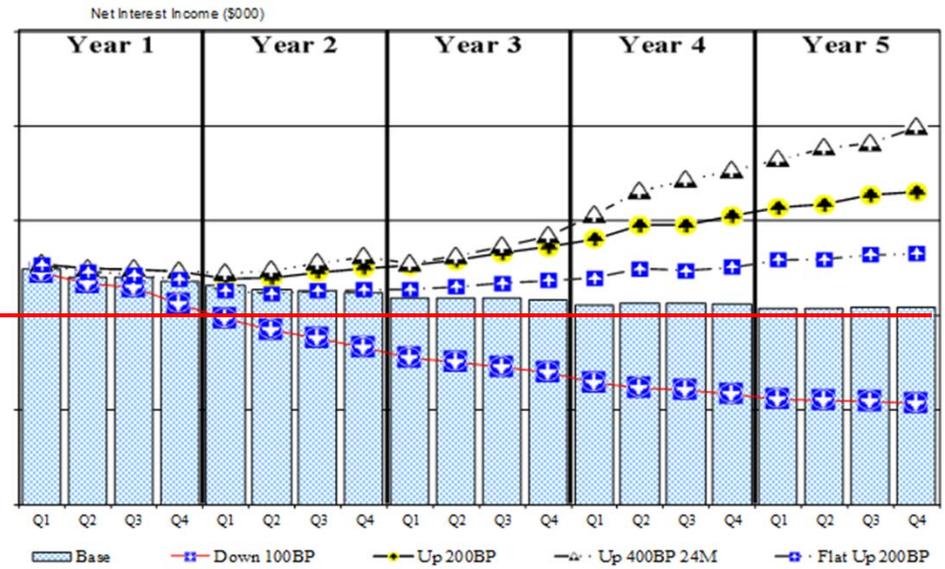
	<u>Down 100BP</u>	<u>Base</u>	<u>Up 200BP</u>	<u>Flat Up 200BP</u>	<u>Up 400BP 24M</u>
Year-1 NII	794	786	537	501	537
Year-2 NII	808	786	281	217	-9
Year-3 NII	777	786	342	240	-191
Year-4 NII	747	786	402	284	-59
Year-5 NII	720	786	453	283	54

Extend \$100MM Cash to 15 Yr. MBS

Base Simulation



\$100MM Cash Extension - MBS





Capital: Opportunity Cost of Too Much?

CAPITAL POSITION		Current Position	Policy Minimum	Well - Capitalized
Net Worth Ratio	\$76,584	10.46%		7.00%
OCI Adjustment	\$439			
FAS 115 Adjusted Net Worth Ratio	<u>\$77,023</u>	10.52%		
Current Adjusted Asset Base	\$732,359			
Risk Based Net Worth Requirement * 9/30/2015		6.84%		

Net Worth Ratio is as of the 9/30/2015 call report.

GROWTH / CAPACITY SCENARIO #1

Targeted Net Worth Ratio 10.00%

Total Asset Capacity (at targeted NW ratio) \$765,840
 Less: Current Adjusted Assets \$732,359
 Available Growth Capacity \$33,481

Maximum Allowable Loss \$3,348

GROWTH / CAPACITY SCENARIO #2

Targeted Net Worth Ratio 9.50%

Total Asset Capacity (at targeted NW ratio) \$806,147
 Less: Current Adjusted Assets \$732,359
 Available Growth Capacity \$73,788

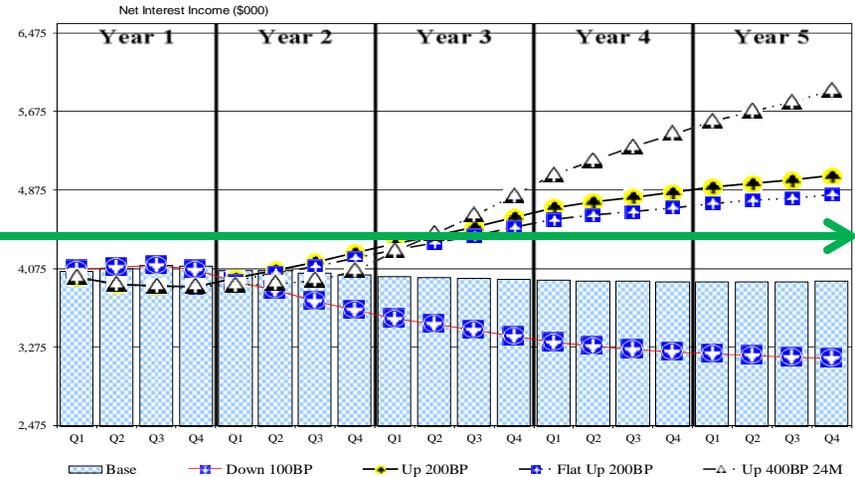
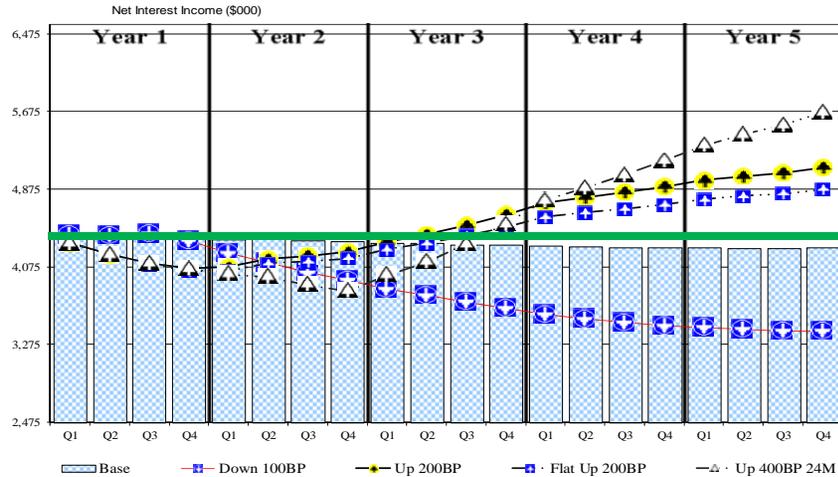
Maximum Allowable Loss \$7,010



De-leveraging Strategy \$90 Million Concern over borrowing levels and Capital

Base Simulation as of 12/31/2015

\$90MM Deleverage Strategy



NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	17,562	17,600	16,685	16,651	16,689
Year-2 NII	16,286	17,389	16,645	16,434	15,685
Year-3 NII	14,981	17,224	17,854	17,452	16,938
Year-4 NII	14,096	17,113	19,276	18,605	19,830
Year-5 NII	13,711	17,065	20,120	19,276	21,956

NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	16,317	16,346	15,687	15,667	15,687
Year-2 NII	15,186	16,175	16,409	16,253	15,831
Year-3 NII	13,902	15,940	17,816	17,504	18,107
Year-4 NII	13,075	15,817	19,097	18,541	20,961
Year-5 NII	12,721	15,788	19,842	19,130	22,911

CHANGE / DIFFERENCE IN RESULTS					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	-1,245	-1,254	-998	-984	-1,002
Year-2 NII	-1,100	-1,214	-235	-182	147
Year-3 NII	-1,079	-1,284	-38	52	1,169
Year-4 NII	-1,021	-1,296	-179	-64	1,131
Year-5 NII	-990	-1,277	-278	-146	955

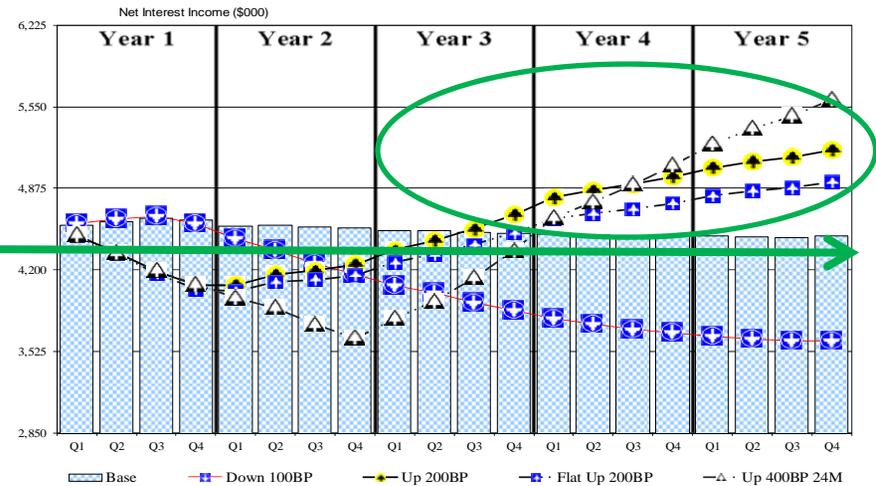
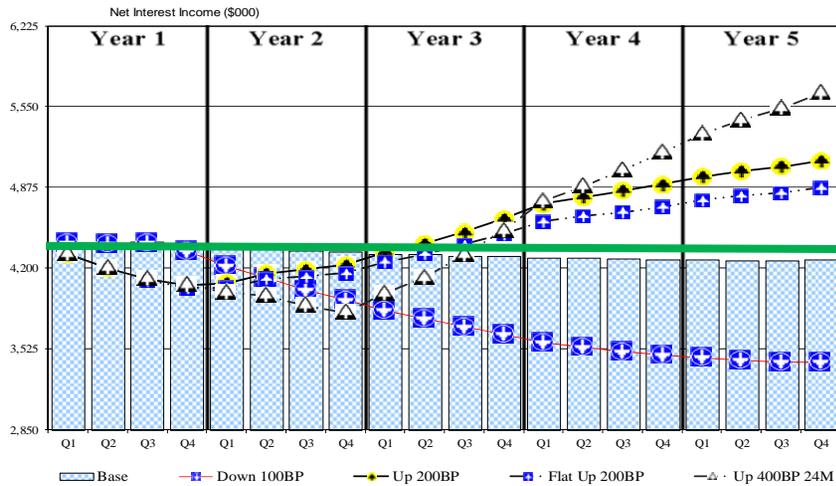
All outstanding FHLB borrowings are immediately paid off (0.66% WAR), funded using proceeds from the sales of Agency and MBS securities (2.35% WAY).
Results in balance sheet contraction of \$90MM.
The model does not include the impact of any prepayment penalties associated with paying off borrowings.



“Leverage” Strategy \$50MM, same Credit Union

Base Simulation as of 12/31/2015

\$50MM Leverage Strategy



NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	17,562	17,600	16,685	16,651	16,689
Year-2 NII	16,286	17,389	16,645	16,434	15,685
Year-3 NII	14,981	17,224	17,854	17,452	16,938
Year-4 NII	14,096	17,113	19,276	18,605	19,830
Year-5 NII	13,711	17,065	20,120	19,276	21,956

NII SUMMARY					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	18,430	18,423	17,091	17,023	17,095
Year-2 NII	17,235	18,248	16,673	16,397	15,229
Year-3 NII	15,872	18,083	18,001	17,503	16,219
Year-4 NII	14,931	17,972	19,533	18,737	19,356
Year-5 NII	14,500	17,923	20,467	19,475	21,684

CHANGE / DIFFERENCE IN RESULTS					
	Down 100BP	Base	Up 200BP	Flat Up 200BP	Up 400BP 24M
Year-1 NII	868	823	406	372	406
Year-2 NII	950	859	29	-38	-455
Year-3 NII	891	859	146	50	-719
Year-4 NII	836	859	257	132	-475
Year-5 NII	789	858	347	199	-272

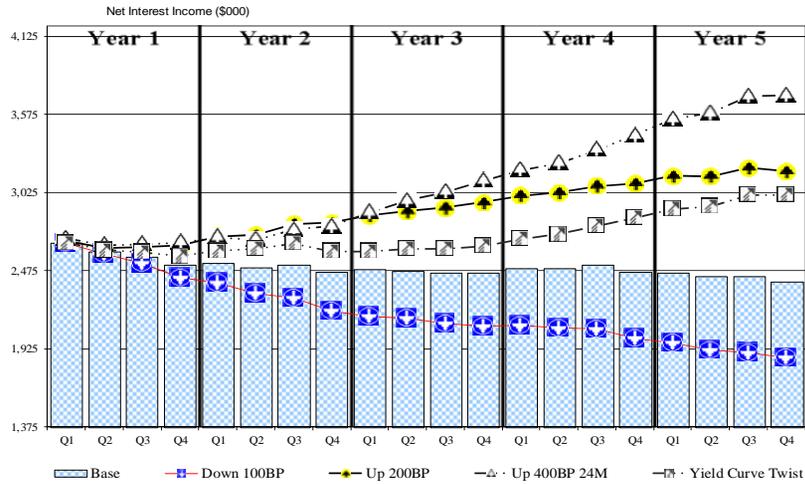
The strategy “hedges” against flat, falling and moderately rising rates: the sooner rates rise, the better!

Purchase \$50MM blend of 15Y, 20Y and 30Y Agency pass throughs with a WAR of 2.34%.
 Funded using FHLLB 1-month borrowings @ 0.61%
 Results in balance sheet growth of \$50MM.

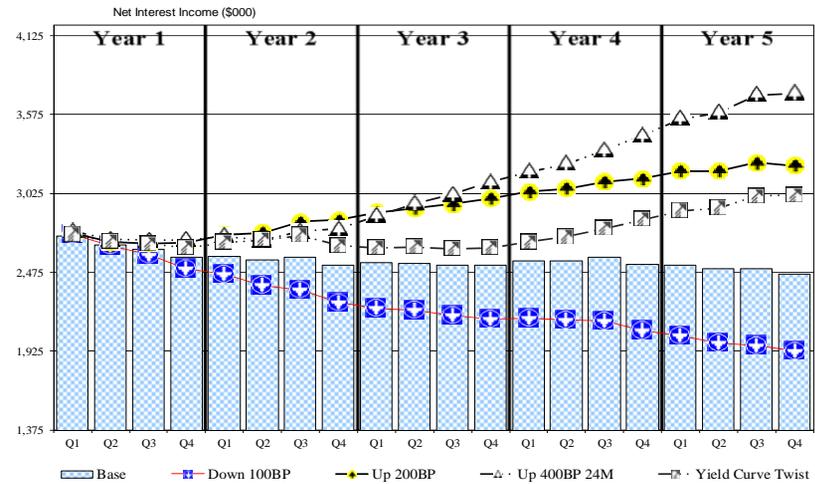


\$10 Million Loan Purchase Funded “Short”

Base Model as of 4/30/2014



\$10M Purchased Loans



NII SUMMARY					
	Down 100BP	Base	Up 200BP	Up 400BP 24M	Yield Curve Twist
Year-1 NII	10,214	10,355	10,608	10,688	10,471
Year-2 NII	9,176	9,992	11,056	10,956	10,517
Year-3 NII	8,480	9,863	11,626	11,990	10,515
Year-4 NII	8,230	9,953	12,185	13,167	11,063
Year-5 NII	7,645	9,715	12,652	14,532	11,852

NII SUMMARY					
	Down 100BP	Base	Up 200BP	Up 400BP 24M	Yield Curve Twist
Year-1 NII	10,497	10,629	10,787	10,867	10,747
Year-2 NII	9,463	10,271	11,158	10,963	10,778
Year-3 NII	8,758	10,146	11,753	11,941	10,583
Year-4 NII	8,501	10,239	12,334	13,160	11,031
Year-5 NII	7,910	10,005	12,820	14,563	11,842

CHANGE / DIFFERENCE IN RESULTS					
	Down 100BP	Base	Up 200BP	Up 400BP 24M	Yield Curve Twist
Year-1 NII	283	274	179	179	276
Year-2 NII	287	279	102	7	260
Year-3 NII	278	283	127	-48	68
Year-4 NII	271	286	149	-7	-32
Year-5 NII	265	290	168	30	-10

This model assumes \$5M of Resi 5/1 ARM (@ 2.50%), \$2.5M of Resi 7/1 ARM (@ 3%) and \$2.5M of 30 Yr Jumbo (@ 3.875%) funded with short term funding (@ 25 bps).

- ◆ Fewer, Larger CUs
- ◆ Mergers of Small CUs
- ◆ Lower Returns/Profits
 - .50% ROA the “New 1%”



- ◆ Many Will Seek More Fee Related Income, Many will witness “lower” fee income
- ◆ Use of Wholesale Funding Will Be “Needed” to Grow, Remain Competitive, Increase Earnings and Grow Capital
- ◆ *But....NII Will Remain Driver for most*

- ◆About Deposit Strategy
- ◆About Loan Strategy
- ◆About Capital Management
- ◆About Liquidity
- ◆About Wholesale funding
- ◆About Earnings at Risk
- ◆About Utility of NEV



....About SURVIVAL of Fittest!

- ◆ Margins Under Pressure....expect more of the same 2016
- ◆ Rising Rates HELP, don't bet on higher rates to the rescue!
- ◆ Flatter Curve will require GROWTH and/or shift in mix
- ◆ Deposit Behavior a Wildcard in 2016 (COF mgm't KEY)
- ◆ OPPORTUNITIES EXIST NOW! Take Action that fits your CU and not what others are doing OR based on Regulator fears
- ◆ Wholesale Funds are a CU's best friend, use them to your Strategic ADVANTAGE!



- John F. Kennedy

“There are risks and costs to any program of action. But those risks are far less than the long range risks and costs of comfortable inaction.”

Whats *On* Your MIND?

- ◆ Interest Rate Risk (Asset vs. Liability Sensitive)
- ◆ Role of Derivatives (Swaps/Caps/Floors)
- ◆ Capital Management/NEV
- ◆ Investment Portfolio Mgmt.
- ◆ Particular Regulatory Concerns/Issues
- ◆ Other

