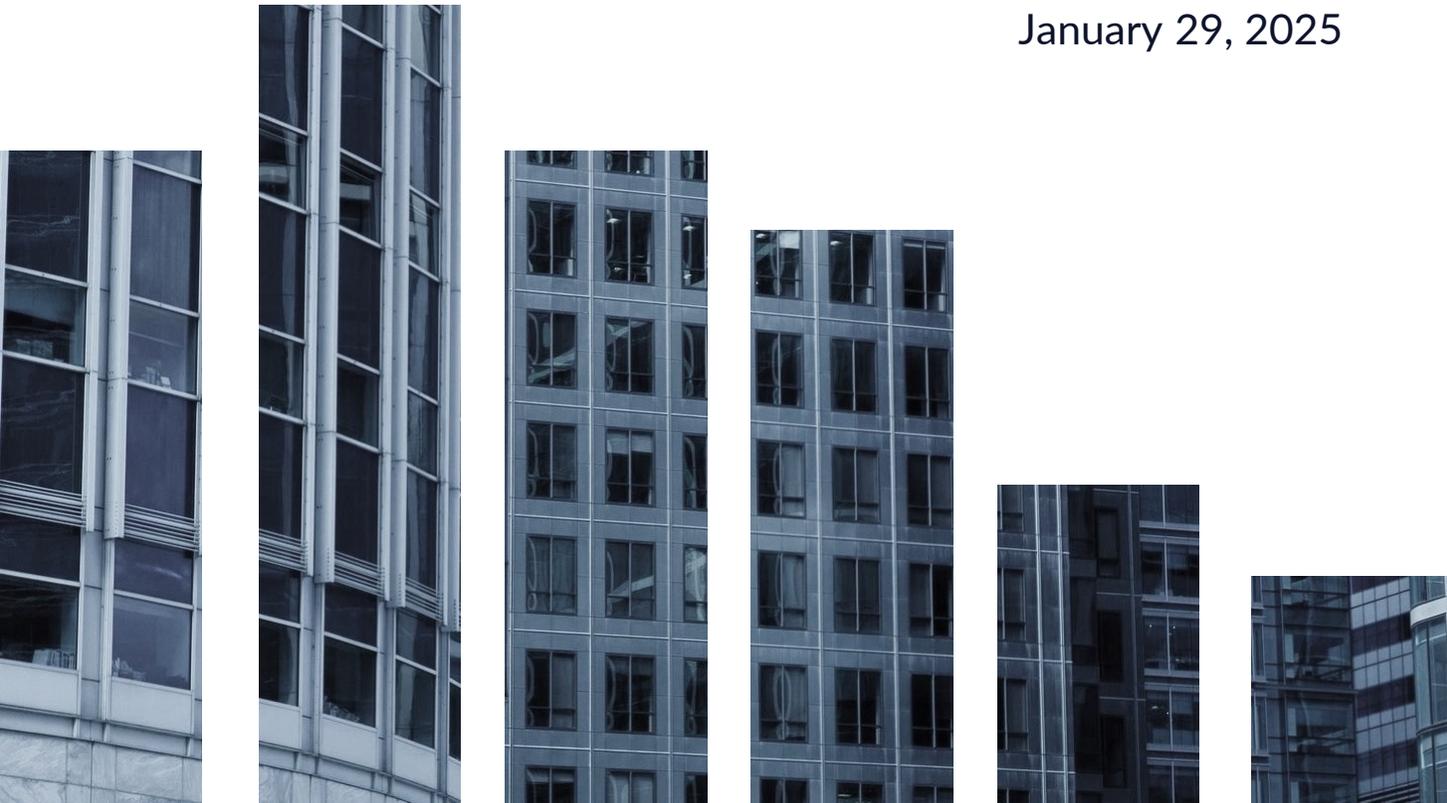


MANAGING AND MONITORING PROFITABILITY FOR INCREASED VALUE

Bryan Ridgway & Will Newcomer
January 29, 2025



Today's Speaker



BRYAN RIDGWAY

Director, Performance Management,
Empyrean Solutions

With thirty years of experience in the financial risk and performance management areas within the banking industry, Bryan's current responsibilities include assisting clients and prospects in understanding how Empyrean solutions can help measure, model, analyze and improve their overall financial performance.

He is a frequent speaker at national and regional professional meetings and webinars and has authored numerous articles for industry publications.

Bryan holds an M.B.A. in Global Management with emphases in Finance, European Studies, and German from the Thunderbird School of Global Management, and a B.S. in Business Administration from Pepperdine University.

Today's Speaker



WILL NEWCOMER

Director, Finance & Risk
Empyrean Solutions

Will Newcomer is the Director of Finance and Risk at Empyrean Solutions, managing Profitability Advisory Services to clients on all matters relating to risk and behavior adjusted performance management.

Prior to joining Empyrean Mr. Newcomer was the Vice President of Business Development and Strategy for Wolters Kluwer Finance, Risk and Reporting solutions, Managing Director of Performance and Compensation at SunGard, was Senior Vice President, Director of M.I.S. and Profitability Analysis at BancorpSouth (now Cadence) and served as Vice President – Marketing and Planning at Bank of America - Texas.

Mr. Newcomer has extensive experience in enterprise-wide management information systems focusing on risk-adjusted profitability, Asset/Liability management systems, Budgeting and Planning, incentive compensation, financial reporting and stress testing systems.

AGENDA

- 1 Industry Trends
- 2 Why is Profitability Important
- 3 Foundation of the Profitability Calculation
- 4 Effective Usage Profitability
- 5 Final Considerations



CREDIT UNION INDUSTRY UPDATE (Q3 2024)

\$59b

Y/Y Growth in Total SHARES & DEPOSITS



SHARE CERTIFICATE growth from previous year

24%

51%

Increase in annualized INTEREST EXPENSE



Y/Y drop in Net Income

30% & 47%

Increase in Loan Delinquency & Charge Off Rates (4 QTR % change)



of CUs

3%

Yr. over Yr. Decline



ROA

down from 76bp in Q3 2023; Median ROA of 63pb in Q3 2024

30%

Decline Over Past 10 Years



+4 basis point

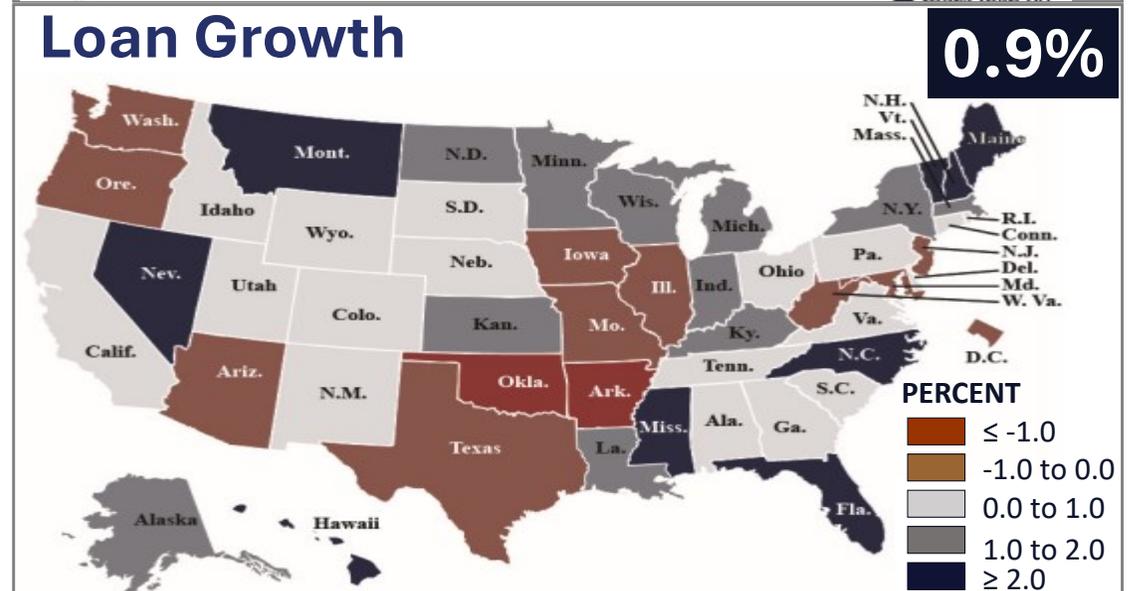
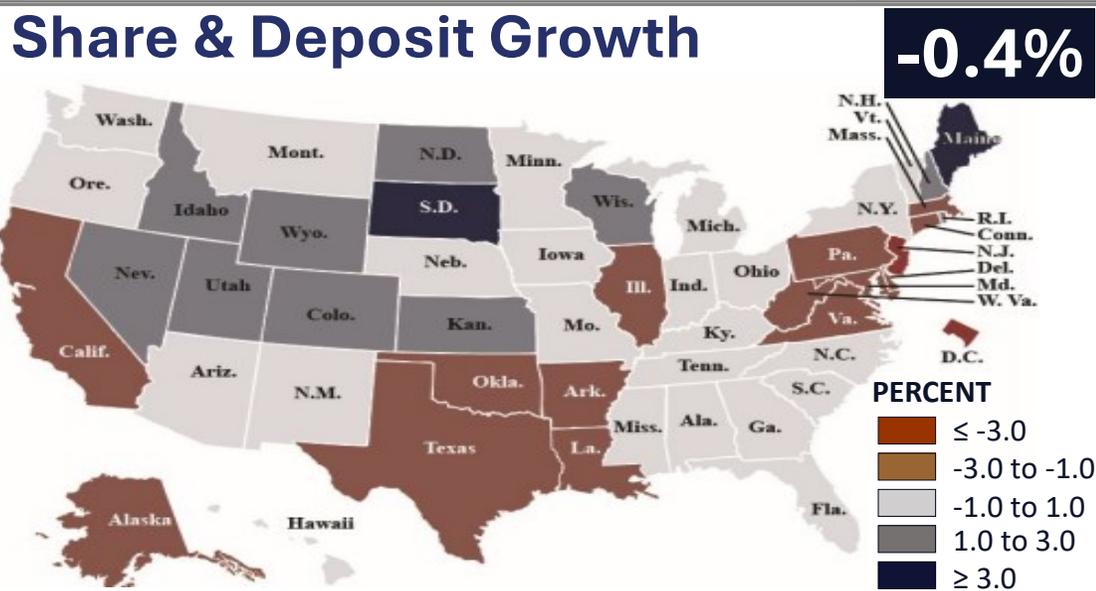
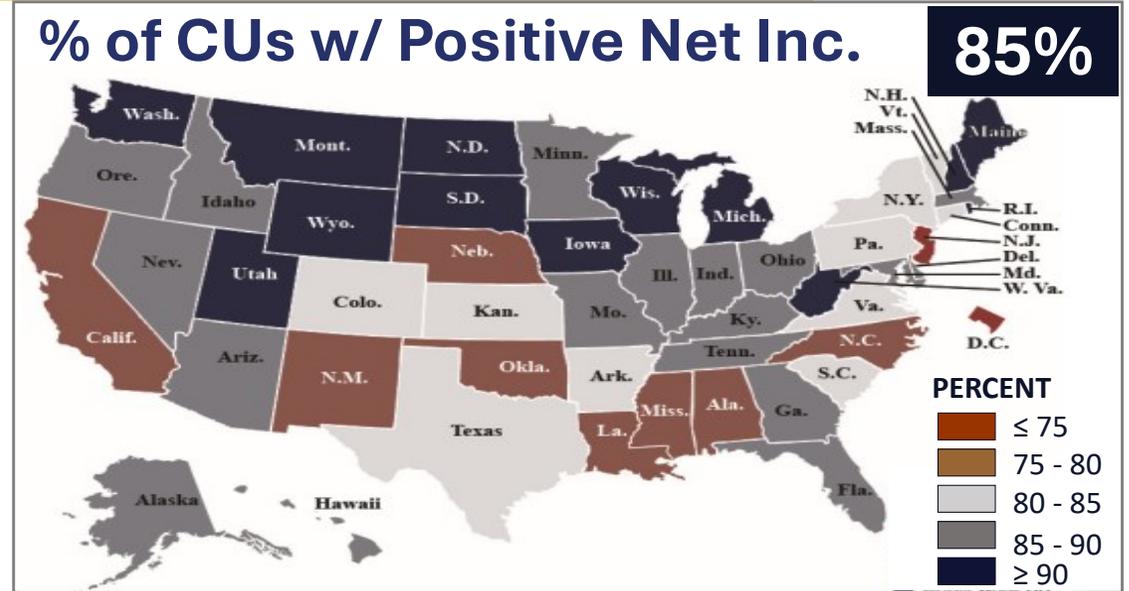
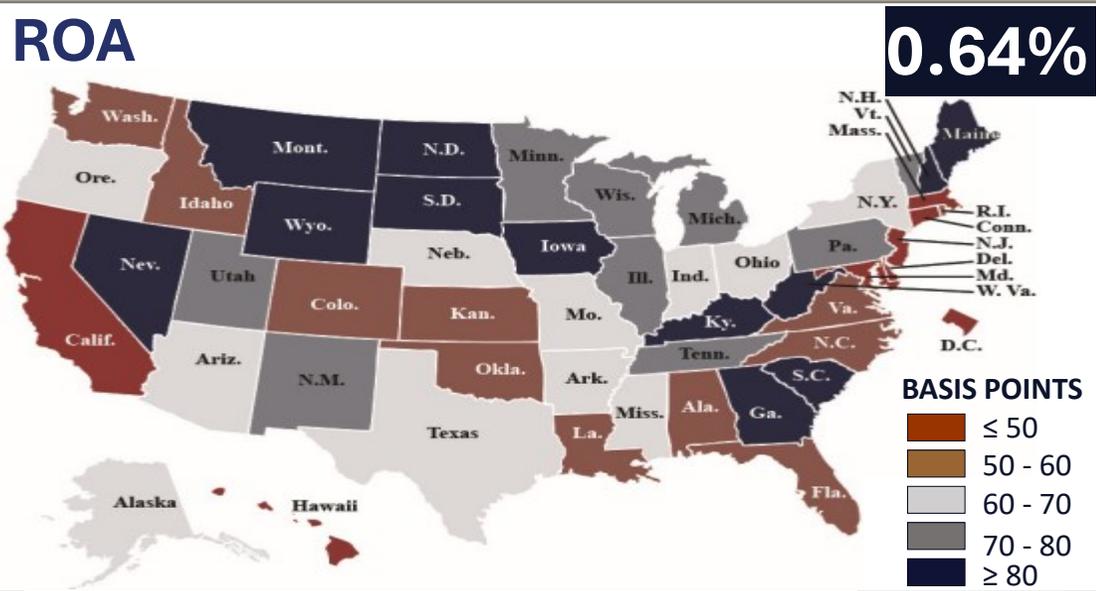
TIGHT MARGINS, BUT NIM was flat in 2023 and was up 7bp Yr. over Yr.



10yr - 3mo TSY SPREAD Inverted for previous 26 mos.

Source: NCUA Q3 2024 Quarterly Summary Report

CREDIT UNION INDUSTRY TRENDS – Q3 2024



Source: NCUA (Note all numbers are based on Median results)

AGENDA

- 1 Industry Trends
- 2 **Why is Profitability Important**
- 3 Foundation of the Profitability Calculation
- 4 Effective Usage Product Profitability
- 5 Final Considerations



PROFITABILITY – Why is it Important?

 NEW MARKET ENVIRONMENT	Higher interest rates, inverted curve, deposit costs, competition, etc.
 MEMBER BEHAVIOR	Stable vs. non-stable deposits, ease of moving \$, impact on relationships
 NON-INTEREST EXPENSES RISING	Inflation, personnel expenses, digital / mobile transformations
 REGULATORY PRESSURE	Starting to push for profitability, FTP, etc.
 GROWTH PRESSURE	Return on capital, effective use of capital, best way to support growth
 PEER PRESSURE	Keeping up with the Joneses

PROFITABILITY ANALYSIS

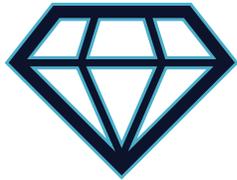
Credit Union Use Cases

CREDIT UNION MISSION & GOALS



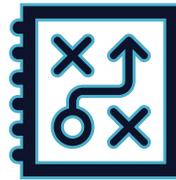
Use Profitability as a tool to better achieve the goals and mission of the Credit Union

MEMBER VALUE CREATION



Create value for all members

STRATEGIC INITIATIVES



Fund strategic initiatives that will add value / service levels for all members

RESOURCE MANAGEMENT



Optimize cost structures and efficiency of tools and processes; Align with CU mission and member expectations

PRODUCT & SERVICE OFFERINGS



Offer value added products and services; at prices and cost levels that don't dilute value

AGENDA

- 1 Industry Trends
- 2 Why is Profitability Important
- 3 Foundation of the Profitability Calculation**
- 5 Effective Usage Product Profitability
- 5 Final Considerations



GAAP vs PROFITABILITY STATEMENT

- + Interest Income
- Interest Expense

Net Interest Income

- Provision
- + Non-Interest Income
- Non-Interest Expense

Net Income (Loss)

- + Interest Income
 - + Interest Income
 - Funds Transfer Pricing (FTP) Expense
- Interest Expense
 - Interest Expense
 - + Funds Transfer Pricing (FTP) Income

Net Interest Income

- Provision
- + Non-Interest Income
- Non-Interest Expense
 - Direct Non-Interest Expense
 - Indirect Non-Interest Expense

Net Income (Loss)

Allocated Net Worth
Risk Adjusted Return On Net Worth (RARONW)

PROFITABILITY CALCULATIONS - MARGIN RISK

+ Interest Income
+ Interest Income
- Funds Transfer Pricing (FTP) Expense
- Interest Expense
- Interest Expense
+ Funds Transfer Pricing (FTP) Income

Net Interest Income

- Provision
+ Non-Interest Income
- Non-Interest Expense
Direct Non-Interest Expense
Indirect Non-Interest Expense

Net Income (Loss)

Allocated Net Worth
Risk Adjusted Return On Net Worth (RARONW)

Matched-Term FTP

- Transfer price individual instruments based on their specific characteristics
- Each instrument receives an FTP credit/charge at the point of origination or last reprice
- Based on the market rates at the point of origination or last reprice
- Net Interest Margin is calculated as both a spread and \$ value for each instrument

+ Interest Income
+ Interest Income
- Funds Transfer Pricing (FTP) Expense
- Interest Expense
- Interest Expense
+ Funds Transfer Pricing (FTP) Income

Net Interest Income

- Provision

+ Non-Interest Income

- Non-Interest Expense

Direct Non-Interest Expense

Indirect Non-Interest Expense

Net Income (Loss)

Allocated Net Worth

Risk Adjusted Return On Net Worth (RARONW)

Non-Interest Allocations

- Load Non-Interest Income at the transaction / instrument level from source systems
- Allocate all other Non-Interest Income to instruments or management centers
- Allocate Direct Non-Interest Expense based on instrument level drivers (usage, risk, etc.)
- Allocate Indirect Non-Interest Expense to instruments based on efficiency drivers (FTEs, square feet, etc.)

PROFITABILITY CALCULATIONS - CAPITAL RISK

- + Interest Income
 - + Interest Income
 - Funds Transfer Pricing (FTP) Expense
- Interest Expense
 - Interest Expense
 - + Funds Transfer Pricing (FTP) Income

Net Interest Income

- Provision
- + Non-Interest Income
- Non-Interest Expense
 - Direct Non-Interest Expense
 - Allocated Non-Interest Expense

Net Income (Loss)

Allocated Net Worth
Risk Adjusted Return On Net Worth (RARONW)

Allocating Net Worth and RARONW

- Import with instrument data (from CECL)
- Single, Product or Department level capital rate
- Basel 3 Standardized or Advanced IRB

$$\text{RARONW} = \frac{\text{CALCULATED PROFIT}}{\text{ALLOCATED NET WORTH}}$$

NET WORTH ROLE IN PROFITABILITY ANALYSIS

Member Economic Participation Principle:

“Members are the owners of their credit union and contribute to its capital. Members, not shareholders, benefit from their credit union’s profits in proportion to their relationship and use of its products and services.”

Dollar Profit Contribution

- Valuable & Important information...BUT
- What about the balance amount?
- What about the inherent risks (product or member)?

Risk-Adjusted Return on Net Worth (RARONW)

- Accounts for size and risks
- Allocate net worth to each loan / share account
- The best relative and comparative profitability metric

Profitability as a *'RELATIVE'* metric

Empy Credit Union	
Statement of Profit / Loss	
30 Year Fixed Rate Mortgages: 06/30/2023	
Interest Income	490,265
FTP Expense	405,368
Net Interest Income	84,897
Provision for Loan Loss	19,611
Non-Interest Income	61,283
Direct Non-Interest Expense	73,540
Indirect Non-Interest Expense	7,354
Net Income (Loss)	45,676

Absolute profitability of ONE 'entity' for ONE period provides almost NO value.

PROFITABILITY ANALYSIS

The Role of Net Worth

Profitability in Dollars:

- Understand % contribution to total institution
- Useful in tracking trends over time
- **BUT...**which product is performing best?
 - How big is each portfolio?
 - How much capital investment is required?



Empy Credit Union			
Profitability Comparison			
	Mortgage Loans	Consumer Loans	SBA Loans
Interest Income	490,265	355,892	1,612,702
FTP Expense	375,368	280,212	1,249,567
Net Interest Income	114,897	75,680	363,135
Provision for Loan Loss	19,611	24,912	80,635
Non-Interest Income	85,796	51,604	282,223
Direct Non-Interest Exp.	61,283	44,487	241,905
Indirect Non-Interest Exp.	4,596	5,561	24,191
Net Income (Loss)	115,203	52,325	298,627

PROFITABILITY ANALYSIS

The Role of Net Worth

Return on Assets (ROA):

- Useful in tracking trends over time
- Compare performance of different-sized portfolios
- **BUT...**what is the return on capital invested?
 - Based on inherent risks of each instrument
 - Product, collateral, industry, etc.



Empy Credit Union			
Profitability Comparison			
	Mortgage Loans	Consumer Loans	SBA Loans
Balance	168,090,857	65,703,138	351,862,299
Interest Income	490,265	355,892	1,612,702
FTP Expense	375,368	280,212	1,249,567
Net Interest Income	114,897	75,680	363,135
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Direct Non-Interest Exp.	61,283	44,487	241,905
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Net Income (Loss)	115,203	52,325	298,627
ROA	0.82%	0.96%	1.02%

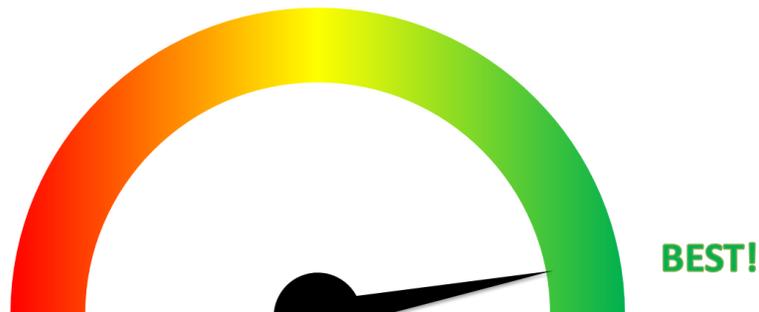
PROFITABILITY ANALYSIS

The Role of Net Worth

Risk-Adjusted Return on Net Worth (RARONW)

- Useful in tracking trends over time
- Compare performance of different sized portfolios
- Compare performance including inherent risks
- Compare performance including required capital

The best comparative metric of performance!



Empy Credit Union			
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Net Income (Loss)	115,203	52,325	298,627
ROA	0.82%	0.96%	1.02%
Allocated Net Worth	10,085,451	5,256,251	35,186,230
RARONW	13.36%	11.65%	9.93%

AGENDA

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- 2 Why is Profitability Important
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PROFITABILITY

Turning Profitability into a Decision Support Tool

INFORMATIONAL / NICE TO HAVE



- Trend Reports
- Comparative Reports
- Ranking Reports
- Decile / Quartile Reports



- Finance Team
- Executives
- LOB Managers



- Product Strategy
- Pricing Strategy
- Channel Strategy

DECISION SUPPORT TOOL



- Member Usage / Demographics
- Profit by Credit Tiers
- Profitability Tiers (Gold/Silver/Bronze)
- Recent Originations
- Maturing Accounts
- Cross-sales



- Branch Managers
- Product Managers
- Credit
- Marketing
- RMs / Officers
- Operations



- Product & Marketing Strategies
- Pricing Strategy & Decisions
- Channel Strategy & Branch Decisions
- Member Interactions & Decisions
- Individual Performance & Behaviors
- Operational Changes

PROFITABILITY ANALYSIS

Credit Union Use Case Examples



LOSS LEADERS – ARE THEY WORTH IT?

Loans, deposits or services – the losses have to be recovered



CROSS SELLING, PRICING & MARKETING

Panacea or placebo – how do you know?



MEMBER ANALYSIS BY PRODUCT

Member statistics, usage, and composition by product



CAPITAL – INVEST, RETAIN, GIVEBACK

RAROC analysis and capital components – Risk, Regulatory, Cushion, Excess



MEMBER USAGE & RISK ACROSS PRODUCTS

Stable vs. non-stable deposits, ease of moving \$, impact on relationships



FRAUD LOSSES – A GROWING PROBLEM

Internal and external fraud, traditional and electronic, reporting and analysis

LOSS LEADER & CROSS-SELLING USE CASES

PRODUCT PROFITABILITY

Loss Leader Analysis

Product Profitability Ranking

Product	Profit Contribution (Rolling 12 mo.)	Profit Rank	% of Total	Avg. Balance	# of Members	Avg. Profit Per Member
NI Share	\$ 1,735,268	1	21.98%	13,240,093	152,176	\$ 11.40
Business Checking	\$ 1,273,424	2	16.13%	14,045,871	8,226	\$ 154.81
Direct Auto	\$ 1,000,266	3	12.67%	9,632,559	57,580	\$ 17.37
Fix Mortgage	\$ 925,266	4	11.72%	7,985,042	45,241	\$ 20.45
HELOC	\$ 627,633	5	7.95%	2,278,309	29,818	\$ 21.05
Credit Card	\$ 551,054	6	6.98%	3,592,873	35,988	\$ 15.31
Int Share	\$ 530,528	7	6.72%	8,292,148	69,919	\$ 7.59
Adj Mortgage	\$ 404,212	8	5.12%	4,296,769	30,846	\$ 13.10
Wealth / IRA	\$ 515,876	10	6.53%	-	22,621	\$ 22.81
Business Loan	\$ 258,948	11	3.28%	6,636,838	6,169	\$ 41.97
Time	\$ 108,158	12	1.37%	608,931	43,185	\$ 2.50
Other	\$ 70,263	13	0.89%	255,056	13,367	\$ 5.26
Indirect Auto	\$ (106,372)	14	-1.35%	(67,014)	34,358	\$ (3.10)
	\$ 7,894,758		1.0000		205,643	\$ 38.39

PRODUCT PROFITABILITY

Loss Leader Analysis

Indirect Auto Loans are a Loss Leader for our CU

Loss Leader Analysis							
Products	% of Members with Indirect	# of Members	% of Total Members	# of Products	Avg. Annual Profit	% With Direct Deposit	Avg. Lifetime Tenure (yrs)
Indirect Auto Loan Only	56.00%	19,240	9.36%	1.00	\$ (112.50)	0.00%	1.50
Indirect + 1 Other Product	32.00%	10,995	5.35%	2.00	(6.87)	6.50%	2.75
Indirect + 2 or More Products	12.00%	4,123	2.00%	4.67	517.52	78.67%	10.17
Total for Indirect Autos	100.00%	34,358	16.71%	1.76	-3.10	11.52%	2.94

- 1 Goal is to attract new members & cross sell other products; 44% Success Rate
- 2 Cross Sale of 1 other product is most popular; but on avg. still results in a loss
- 3 Cross Sale of 2 or more products is not very popular; but very profitable once we do
- 4 Adoption of 2+ products appears to be a strong correlation to securing Direct Deposit

What would you do with this Info?

PRODUCT PROFITABILITY

CROSS SELLING

Product Profitability Ranking						
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	\$ 7,894,758		1.0000		205,643	\$ 38.39

PRODUCT PROFITABILITY

CROSS SELLING

Analyze Wealth Management Cross Sale Opportunities

Cross Sale Analysis						
Products	# of Members	% of Total	Avg. Annual Profit	Total Profit	Avg. Lifetime Tenure (yrs)	
No Wealth Mgt Services	183,022	89%	\$ 26.94	\$ 4,930,725	4.17	
Wealth Mgt Services	10,282	5%	\$ 94.29	\$ 969,512	6.58	
Wealth + Direct Deposit	12,339	6%	\$ 161.64	\$ 1,994,521	7.75	
Total For Member	205,643	100.00%	\$ 38.39	\$ 7,894,758	4.51	

1

Only **11%** of members use our Wealth Management Services

2

3.5x more profitable than standard member

3

6x more profitable if have Direct Deposit with Wealth Management

Should we be cross-selling Wealth Mgt services?

PRODUCT PROFITABILITY

CROSS SELLING

So how important is Direct Deposit?

Direct Deposit Analysis					
Member has Direct Deposit	% of Members	Member Count	Avg. Profit Per Member	Avg. Products Per Member	Avg. Lifetime Tenure (yrs)
No	29.00%	59,636	\$ 5.12	1.36	2.09
Yes	71.00%	146,007	\$ 51.98	3.74	7.58
Total For Member	100.00%	205,643	\$ 38.39	3.05	5.99

1 More value, Stronger relationships!

- Marketing Plans
- Teller, Branch Manager Plans
- Business Development Plans

PROFITABILITY ANALYSIS

Credit Union Use Case Examples



LOSS LEADERS – ARE THEY WORTH IT?

Loans, deposits or services – the losses have to be recovered

- Loss leaders on the lending side carry not only diminished FTP spreads but also the risk of credit losses which consume additional capital
- Loss leaders on the funding side also carry diminished FTP spreads as well as the risk of loss from fraud and increased volatility of your funding mix
- Regardless of which side of the balance sheet, the cost of loss leaders must be measured and made up by other products
- The additional capital consumed, or not earned, must be accounted for in setting product prices, capital expenditures and its impact on building capital for growth



CROSS SELLING, PRICING & MARKETING

Panacea or placebo – how do you know?

- Do you know which products and features actually result in members taking on additional products?
- Do you have firm knowledge and understanding of how to promote the next likely product and what the expected revenue increase will be?
- Do you know which members may leave due to lack of products and features?
- Do you have the ability to measure the effectiveness and profitability of your cross selling opportunities over time, and identify new products and features that result in expanded relationships?

MEMBER COMPOSITION ANALYSIS BY PRODUCT USE CASES

PRODUCT PROFITABILITY DATA

Direct Auto Loans

P&L

- Product Level
 Per Account

Net Interest Income

Interest Income	345
FTP Charge	298

NII Before Provision 47

Provision Expense 4

NII After Provision 43

Non-Interest Income

Origination Fees	42
Gap & Warranty	3
Other Fees	5

Non-Interest Expense

Direct Expenses	51
Indirect Expenses	22

Net Income 20

of Accounts

2,152

Avg. Balance

\$16,984

12 mo. Product Profit

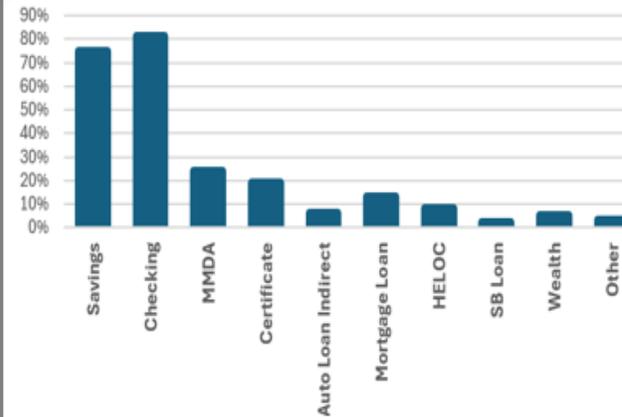
\$267,844

Product NIM

4.36%

PRODUCT MEMBER PROFILE

Other Products Owned



Avg. Products Owned

3.4

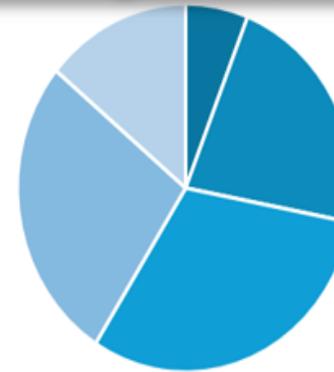
Avg. Profit Per Member

\$398

Avg. Member Tenure

46.5

Age Profile



■ <22 ■ 22-30 ■ 30-40 ■ 40-50 ■ 50+

Channel Usage

Online	38%
Branch	14%
Moblite	29%
Check	19%

PROFITABILITY NET WORTH USE CASES

PROFITABILITY

Net Worth Analysis

$$RARONW = \frac{\text{CALCULATED PROFIT}}{\text{ALLOCATED NET WORTH}}$$

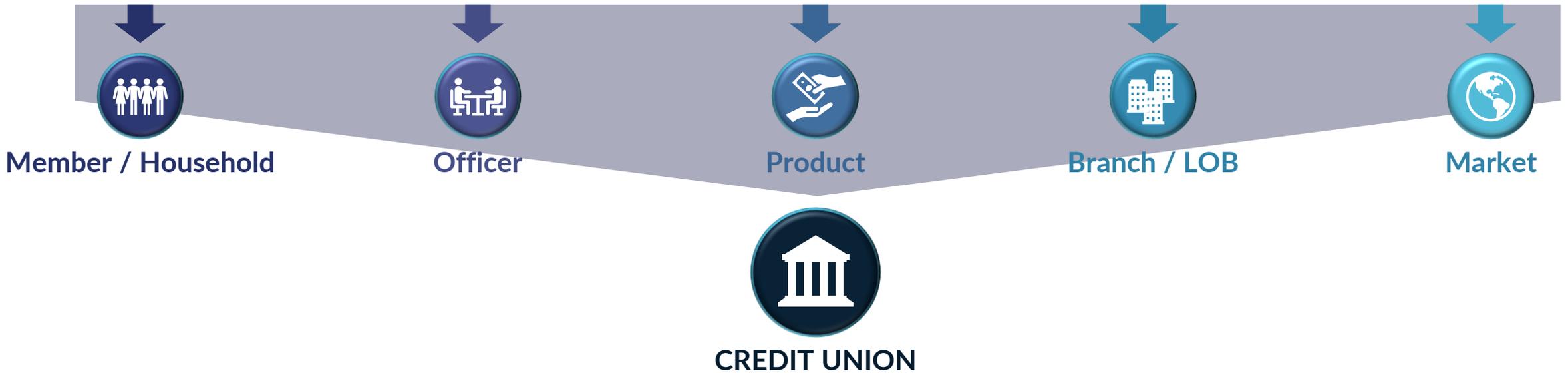
Capital Allocation %s						
Products		Credit Risk	Market Risk	Operational Risk	Capital Buffer	Total Capital Rate
Auto Loan		2.40%	1.95%	0.65%	4.00%	9.00%
Credit Card		4.10%	1.20%	0.70%	4.00%	10.00%
Member Share		0.00%	0.00%	1.00%	4.00%	5.00%

PROFITABILITY

Net Worth Analysis

Member: John Smith

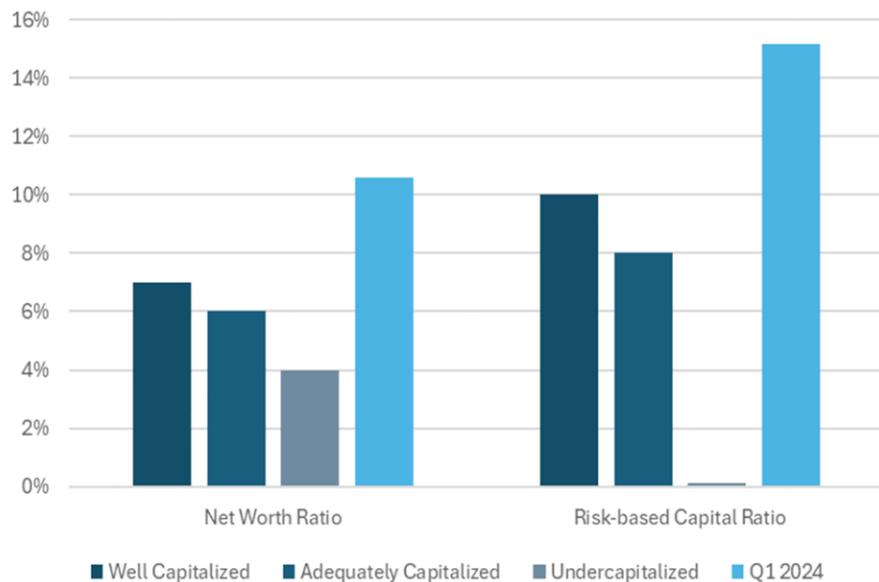
Products	Balance	Product Capital Rate	Allocated Capital	Member Profitability	Member RAROC
Auto Loan	\$ 40,000	9.00%	\$ 3,600	\$ 448.00	12.44%
Credit Card	\$ 5,000	10.00%	\$ 500	\$ 77.50	15.50%
Member Share	\$ 2,000	5.00%	\$ 100	\$ 10.40	10.40%
Total For Member	\$ 47,000	8.94%	\$ 4,200	\$ 535.90	12.85%



Net Worth Analysis

WHAT IS THE OPTIMAL LEVEL OF CAPITAL FROM A MANAGEMENT & BOARD PERSPECTIVE?

Credit Union Capital Ratios



Regulatory Capital

(Required capital to withstand potential losses)

+ Capital Buffer

(Additional capital surplus desired by CU for 'safety' purposes)

+ Strategic Capital

(Capital needed to support planned strategic initiatives)

Optimal Capital

Specific to your institution

PROFITABILITY

Net Worth Analysis

EMPY CREDIT UNION

NET WORTH ANALYSIS

2023 ACTUAL NET WORTH		OPTIMAL NET WORTH		CAPITAL EXCESS / SHORTAGE	
Net Worth	\$ 997,252,365	Net Worth	\$ 956,523,834	\$	40,728,531
Net Worth Ratio	9.89%	Net Worth Ratio	9.52%		0.37%

What Do we do with Excess Net Worth?

EXCESS NET WORTH?

- 1 Invest It
- 2 Retain It
- 3 Member Giveback Program

Rochdale Pioneers: *“distribution of refunds on a patronage basis”*

PROFITABILITY

Member Giveback Program

How to Determine How Much Different Members Receive?



Same for all Members?



Loyalty-based (tenure)?



Value-based?

Value-based Member Giveback Example

	2023 Net Income Range	Number of Members	% of Members	Annual Member Profit	Total Allocated Capital	Member Return on Net Worth
1	Less than \$0.00	352,231	54%	(\$95,926,321)	\$189,327,337	-51%
	\$0.01 - \$99	70,793	11%	\$2,788,529	\$29,841,126	9%
	\$100 - \$249	40,525	6%	\$5,523,849	\$30,004,542	18%
	\$250 - \$500	70,726	11%	\$21,483,512	\$83,362,287	26%
	\$500 - \$999	46,202	7%	\$30,076,943	\$87,178,084	35%
	\$1000 - \$1500	19,319	3%	\$21,819,147	\$53,165,700	41%
	\$1500+	51,305	8%	\$221,308,302	\$524,373,289	42%
	Total	651,100	100%	\$ 207,073,961	\$ 997,252,365	21%

PROFITABILITY

Value-based Member Giveback Program

Value-based Member Giveback Example

	2023 Net Income Range	% Excess Return on Net Worth over Benchmark	\$ Excess Return on Net Worth over Benchmark	% of Total Excess Return	\$ Excess Capital Allocation	\$ Dividend Giveback per Member
2	Less than \$0.00					
	\$0.01 - \$99	<i><--Does not meet 10% Benchmark; does not qualify for dividend</i>				
	\$100 - \$249	8.9%	\$2,667,416	1.2%	\$480,414	\$11.85
	\$250 - \$500	16.3%	\$13,547,423	6.0%	\$2,439,954	\$34.50
	\$500 - \$999	25.0%	\$21,777,589	9.6%	\$3,922,245	\$84.89
	\$1000 - \$1500	31.5%	\$16,757,773	7.4%	\$3,018,152	\$156.23
	\$1500+	32.7%	\$171,387,965	75.8%	\$30,867,766	\$601.65
	Total	11.34%	\$226,138,165	100%	\$40,728,531	\$177.83

Note: For members that do not qualify, a portion of the total giveback could be distributed pro rata

Allows for dividend givebacks for each member that are...

- Proportional to their relationship with the credit union
- Driven by the value they contribute
- Aligned with the inherent risks that must be managed by the credit union

MEMBER USAGE & RISK; FRAUD LOSS USE CASES

PRODUCT PROFITABILITY

Member Usage & Risk

DEPOSIT COMPOSITION CHANGE - YEAR OVER YEAR

Member Deciles	NI SHARES	IB SHARES	MM	SAV	CD 0-1YR	CD 1-2YR	CD 3-5YR	IRA
1	-17%	8%	12%	-13%	116%	156%	11%	12%
2	-19%	6%	10%	-14%	112%	151%	9%	10%
3	-20%	4%	8%	-16%	108%	147%	7%	8%
4	-22%	2%	6%	-17%	104%	142%	5%	6%
5	-23%	0%	4%	-19%	100%	137%	3%	4%
6	-25%	-2%	2%	-21%	96%	133%	1%	2%
7	-26%	-4%	0%	-22%	92%	128%	-1%	0%
8	-28%	-6%	-2%	-24%	88%	123%	-3%	-2%
9	-31%	-10%	-6%	-27%	81%	114%	-7%	-6%
10	-32%	-12%	-9%	-29%	77%	109%	-9%	-9%

1

The most affluent are the most able to react to rate changes

2

Financially educating members is working

3

Sudden large shifts between products drive risk or failure if shift is to other institutions

Member Deciles	NI SHARES	IB SHARES	MM	SAV	CD 0-1YR	CD 1-2YR	CD 3-5YR	IRA
1	(\$17,164)	\$13,009	\$25,703	(\$9,614)	\$51,989	\$30,590	\$3,320	\$5,558
2	(\$17,038)	\$8,871	\$19,434	(\$9,872)	\$45,861	\$27,096	\$2,496	\$4,203
3	(\$12,269)	\$3,910	\$10,267	(\$7,310)	\$29,503	\$17,509	\$1,307	\$2,220
4	(\$12,239)	\$1,770	\$7,036	(\$7,464)	\$26,400	\$15,742	\$82	\$1,522
5	(\$10,065)	(\$70)	\$3,491	(\$6,262)	\$19,543	\$11,712	\$423	\$755
6	(\$8,573)	(\$1,201)	\$1,256	(\$5,426)	\$15,022	\$9,052	\$134	\$272
7	(\$5,683)	(\$1,467)	(\$175)	(\$3,652)	\$9,006	\$5,459	(\$44)	(\$38)
8	(\$3,605)	(\$1,309)	(\$681)	(\$2,347)	\$5,174	\$3,157	(\$103)	(\$147)
9	(\$2,664)	(\$1,446)	(\$1,223)	(\$1,773)	\$3,143	\$1,946	(\$171)	(\$264)
10	(\$1,397)	(\$866)	(\$803)	(\$939)	\$1,495	\$933	(\$111)	(\$174)



FRAUD LOSSES – COSTS TO BE OFFSET

DIRECT COSTS

- Actual loss on both deposits and loans

INDIRECT COSTS

- Fraud detection systems and education of members
- Increased staff to manage fraud systems and education

CAPITAL

- Fraud losses require higher capital levels
- The additional capital buffers should be proportionally allocated to products with losses due to fraud

PROFITABILITY ANALYSIS

Credit Union Use Case Examples



MEMBER USAGE AND RISK

Stable vs. non-stable deposits, ease of moving \$, impact on relationships

- Deposit composition changes within product groups and the cost of disintermediation between product groups
- Electronic / digital banking apps versus traditional in-branch costs and risks
- Credit Union members by definition have common characteristics or interests (or at least used to) potentially making contagion across member groups more likely
- “The biggest concern for credit unions is a **liquidity shortage**” (CUNA 2023)



FRAUD LOSSES, COSTS TO BE OFFSET

Internal and external fraud, traditional and electronic, reporting and analysis

- Internal fraud (fraud assisted or committed by employees) can rise with economic downturns, often starts small and grows
- External fraud – how do you tell a Money Mule fraudster from an honest, loyal member?
- KYC focuses on money laundering and terrorism and one of the requirements is: “Financial institutions should be aware of any unusual transaction activity or activity that is disproportionate to the customer’s known business.”
- Profitability reporting at the officer level can reveal troubling member behaviors

AGENDA

- 1 Industry Trends
- 2 Why is Profitability Important
- 3 Foundation of the Profitability Calculation
- 4 Effective Usage Product Profitability
- 5 **Final Considerations**



Recap & Key Takeaways

- Profitability is a critical tool in today's banking environment
- It's not Taboo...actually helps support the CU's goals and mission
- Be sure to account for all components in the measurement process
- Start with the end in mind..."What decisions do you want to make?"
- Take your analysis to the next level...we only covered a handful
- **Final Advice: Must be Driven From the Top Levels of the Organization!**

FINAL THOUGHT

Front Line

CEO / CFO



Wouldn't it be nice if the front line made decisions like I would?



PRODUCTION

- LOANS
- DEPOSITS

“VOLUME, VOLUME & MORE VOLUME”

GROWING THE VALUE

- EARNINGS / ROA / RARONW

MAINTAIN

- LIQUIDITY / CAPITAL / CAMELS

THANK YOU!

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