



Mark H. Smith
I N C O R P O R A T E D

LOAN PRICING

WHAT YOU NEED TO KNOW

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TOPICS TO DISCUSS

- Historical Profitability
- Peer Rates
- Using Historical Profitability and Peer Rates Together
- Risk-Based Lending

HISTORICAL PROFITABILITY

Measured by Incremental Income

- Include Direct Income & Expenses of Loans
- Compare to Risk Free Investment Rates
- Compare to margin expectation among different credit tiers

INCREMENTAL INCOME HISTORICAL PROFITABILITY CALCULATION

Loan Yield +

Origination & Process Fees/Loan Balance +

Other Fees/Loan Balance -

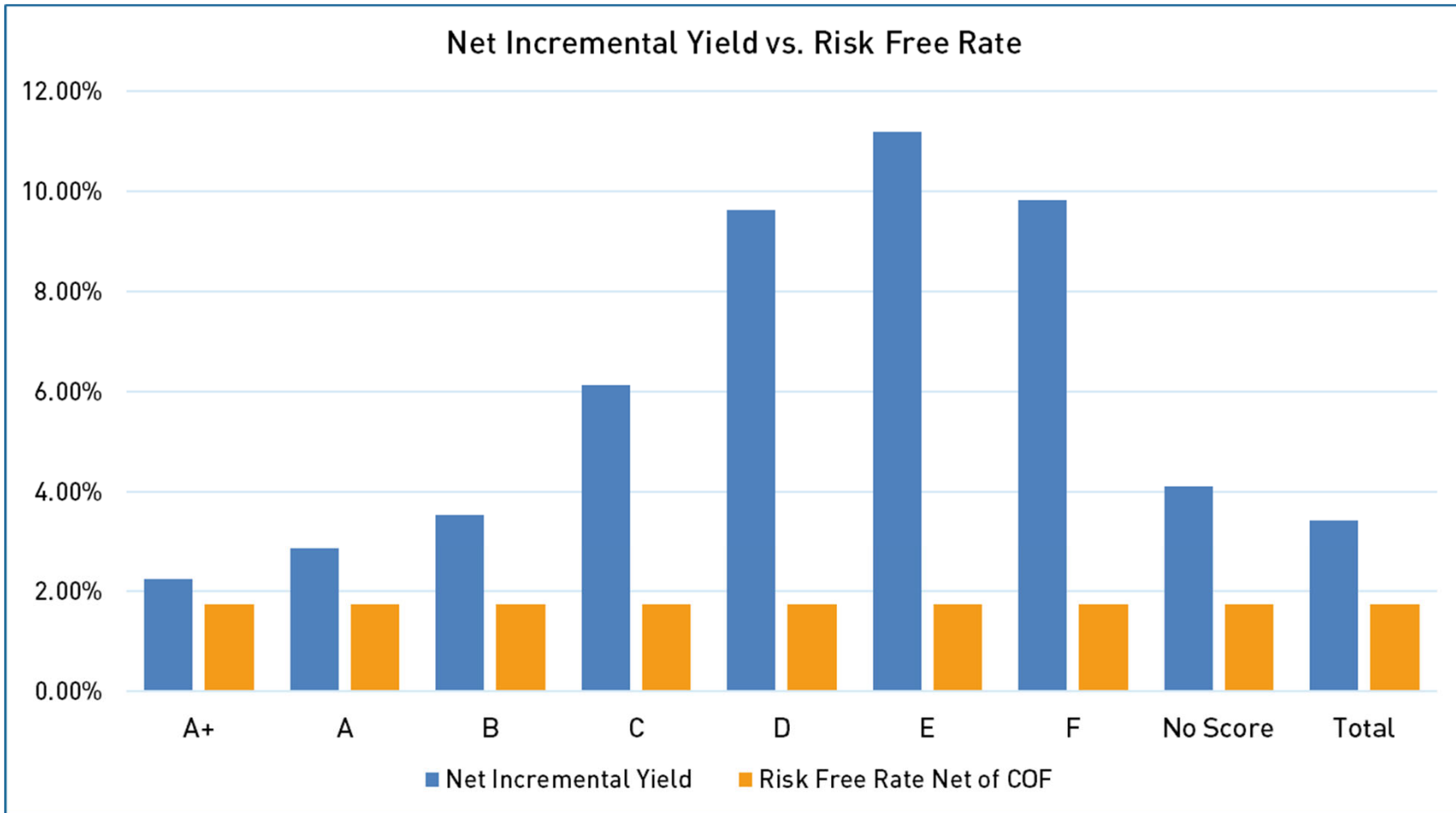
Origination & Process Expenses/Loan Balance -

Servicing Expenses/Loan Balance -

Net Charge Off Rate -

Cost of Funds Rate

LOAN INCREMENTAL YIELD COMPARISON TO RISK FREE INVESTMENT RATE



HISTORICAL PROFITABILITY

Measured by Net Income

- Include All Income & Expenses
- Compare to Net Income Expectations

NET INCOME HISTORICAL PROFITABILITY CALCULATION

Loan Yield -

Net Charge Off Rate +

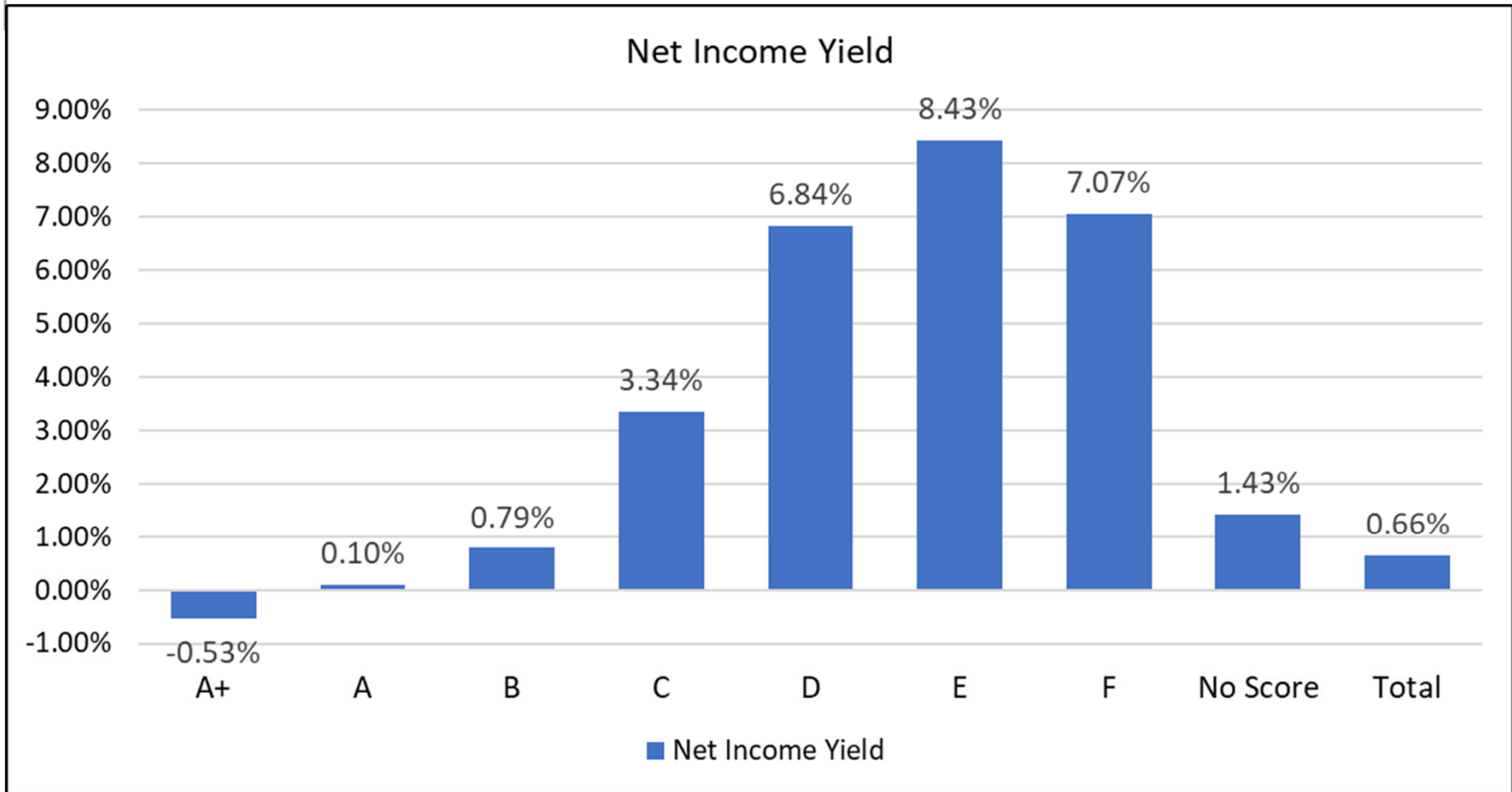
Non-Interest Income/Earning Assets* -

Non-Interest Expenses/Earning Assets -

Interest Expense/Earning Assets

*Earning Assets = Loans, Investments, & Cash
on Deposit

NET INCOME HISTORICAL PROFITABILITY



NET INCOME HISTORICAL PROFITABILITY (CONT.)

- It is a good way to determine which loans should be focused on for growth.
- If a loan's net income yield is negative, it does not mean the credit union should not have made the loan. It may still be more profitable than investing or not making any loan.

Poll Question #1



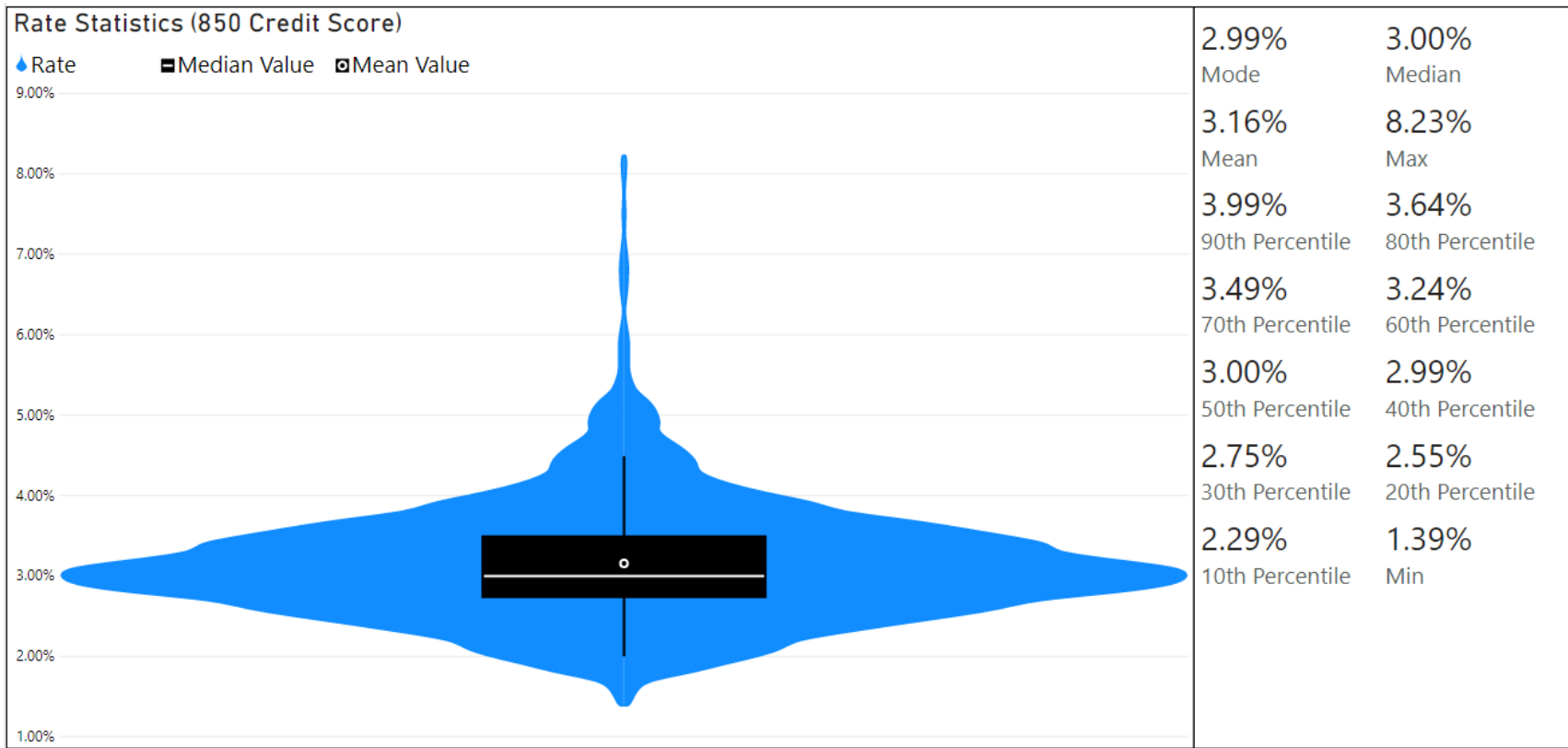
PEER RATES

- Look at more than just the mean rate. The median and mode are also important.
- Be aware of Banks skewing results with higher rates.

Current Rates on 60 Mo Used Auto			
	CUs	Banks	Combined
Median	3.00%	4.95%	3.81%
Mean	3.16%	5.07%	4.12%
Mode	2.99%	5.00%	2.99%

PEER RATES (CONT.)

- Percentiles can help you determine where in the market you want to price your loans.



Poll Question #2



USING HISTORICAL PROFITABILITY AND PEER RATES FOR PRICING

- Historical Profitability is great for reviewing loans already made, but it is pointless if it is not used to help with future pricing decisions.
- Peer rates should be reviewed to ensure competitiveness, but then compared to profitability. This will help the credit union to maximize profitability while maintaining rates that will drive growth.
- You may find that profitability and competitive rates are found in lending to members with lower credit scores.

USING HISTORICAL PROFITABILITY AND PEER RATES FOR PRICING (CONT.)

Pricing can be very dependent on how loaned out the credit union is. If not loaned out, having a negative net income yield may be the right choice.

Net Income Yield									What-If	
Rating	Score Range	Avg Balance	% of Balance	Gross Yield	Charge Off Rate	Net Non-Interest Exp & Inc	Interest Expense	Net Income Yield	What-If Rate	Net Income Yield
A+	720+	3,037,652.41	51.0%	3.02%	0.18%	2.85%	0.52%	-0.53%	3.55%	0.00%
A	680-719	927,027.19	15.6%	3.77%	0.30%	2.85%	0.52%	0.10%	3.81%	0.14%
B	630-679	987,811.19	16.6%	4.57%	0.41%	2.85%	0.52%	0.79%	5.94%	2.16%
C	600-629	473,763.21	7.9%	7.28%	0.57%	2.85%	0.52%	3.34%	8.22%	4.28%
D	570-599	139,387.54	2.3%	10.97%	0.76%	2.85%	0.52%	6.84%	10.82%	6.69%
E	540-569	108,814.35	1.8%	12.66%	0.85%	2.85%	0.52%	8.43%	12.64%	8.42%
F	1-539	141,984.21	2.4%	11.38%	0.95%	2.85%	0.52%	7.07%	14.13%	9.81%
No Score		143,297.70	2.4%	5.30%	0.50%	2.85%	0.52%	1.43%	6.94%	3.07%
Total		5,959,737.81	100%	4.35%	0.32%	2.85%	0.52%	0.66%	5.03%	1.34%

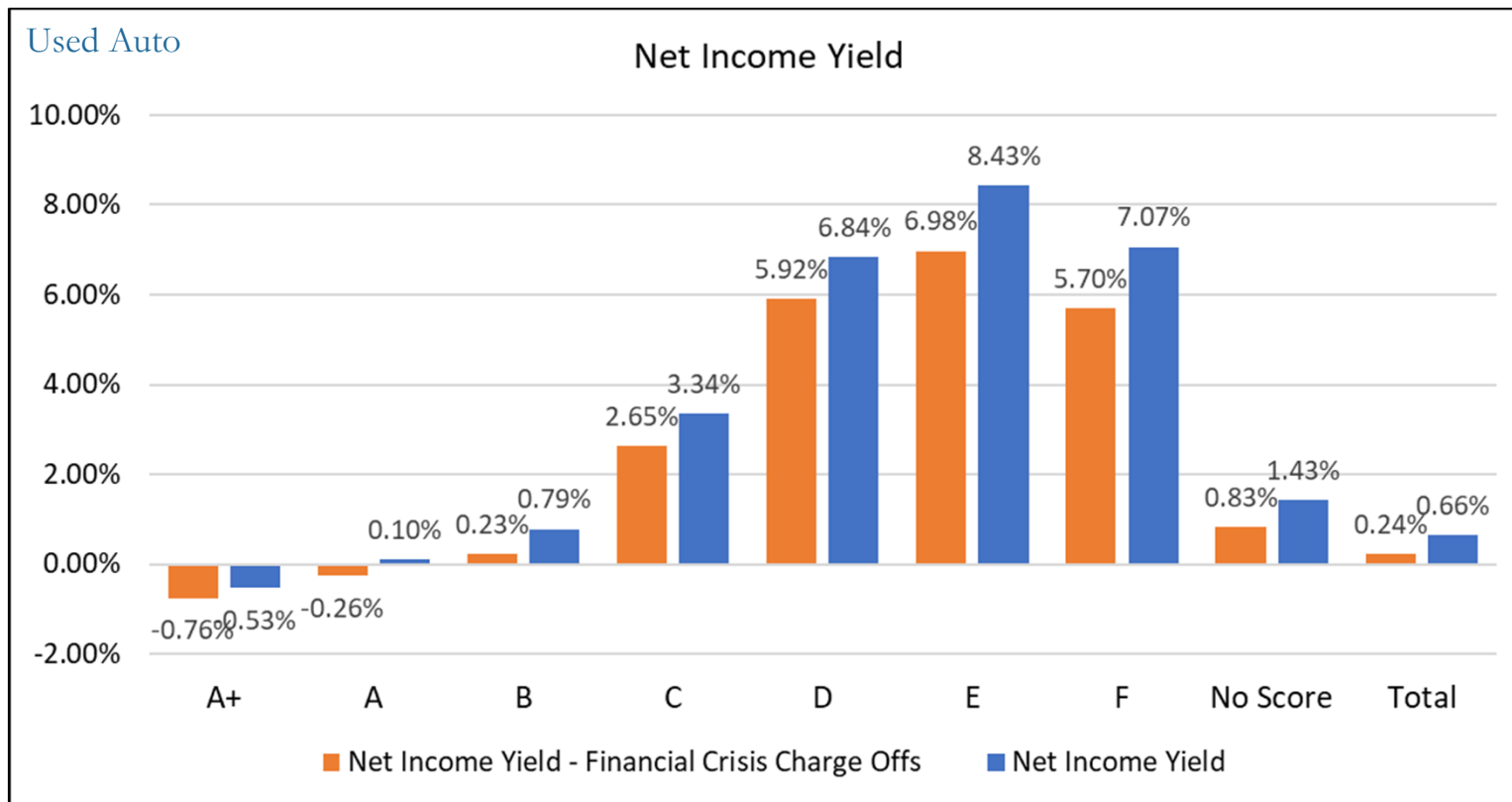
The 3.55% A+ What-If Rate is about the 75th percentile of credit unions. The rest of the credit tiers are 50th percentile (median) of credit unions.

Poll Question #3



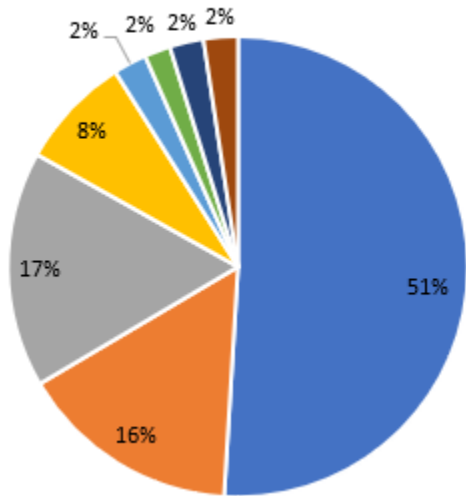
NET INCOME YIELD WITH CHARGE OFF COMPARISON

The profitability should also be assessed with higher charge off rates to see what the profitability would have been in worse economic conditions.

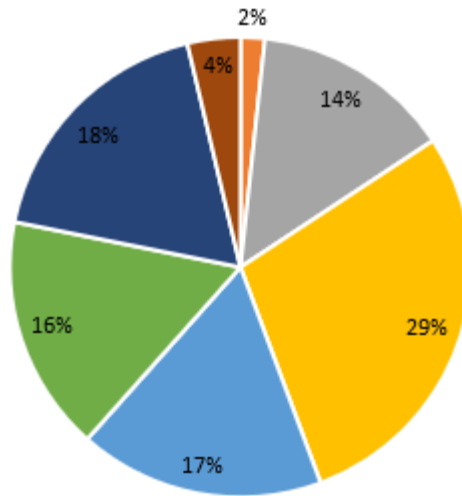


NET INCOME YIELD WITH CHARGE OFF COMPARISON (CONT.)

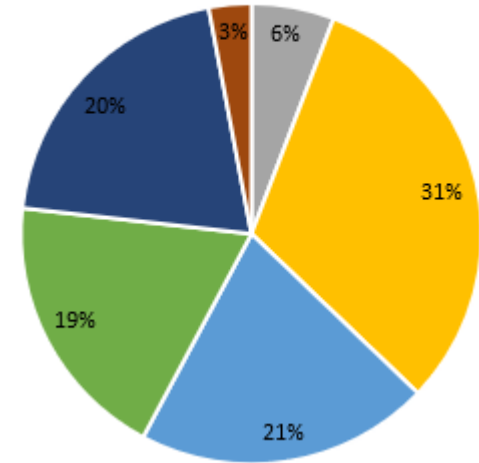
Average Balance



Net Income Yield



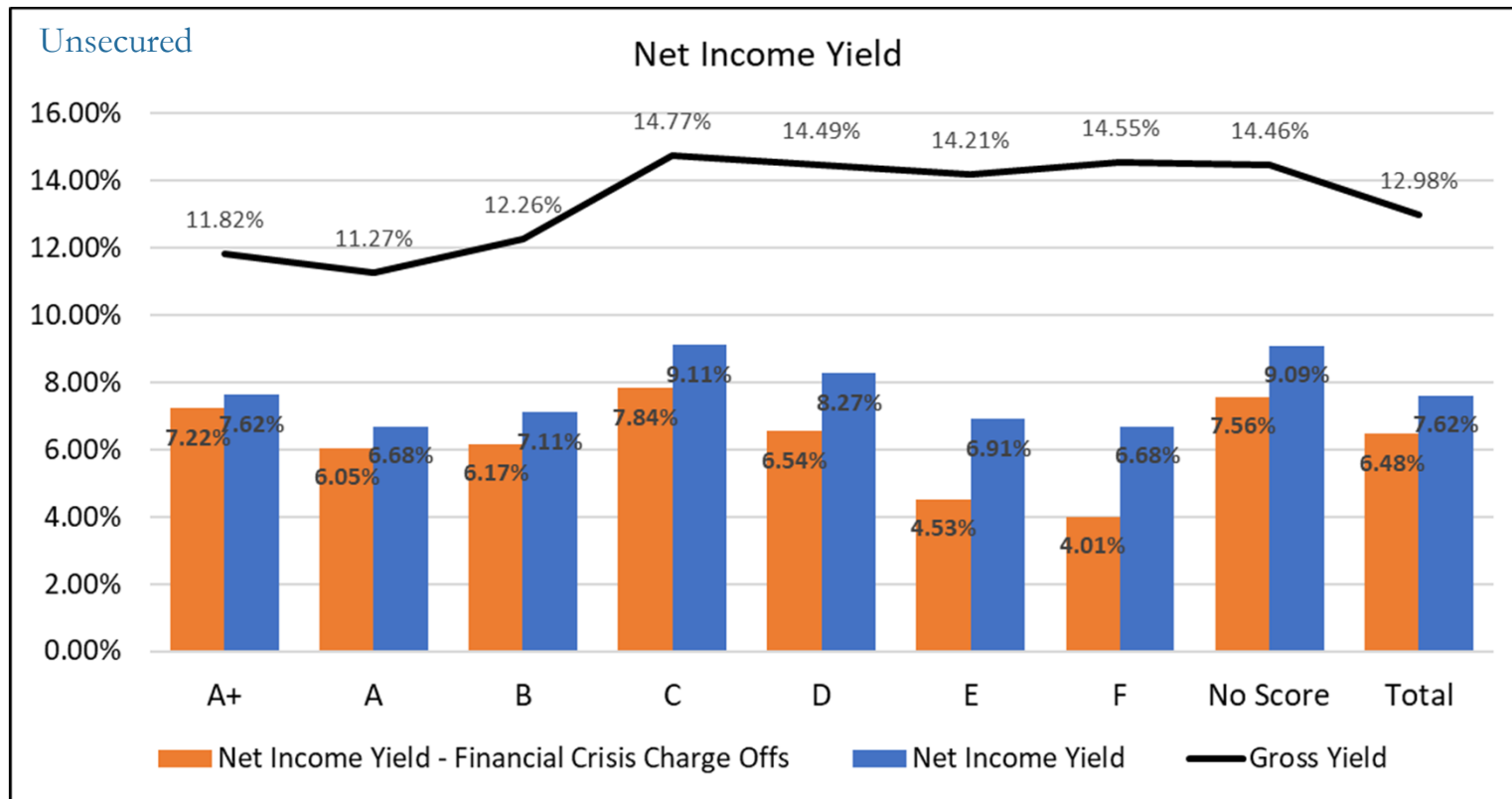
Net Income Yield - Financial Crisis



■ A+ ■ A ■ B ■ C ■ D ■ E ■ F ■ No Score

NET INCOME YIELD WITH CHARGE OFF COMPARISON (CONT.)

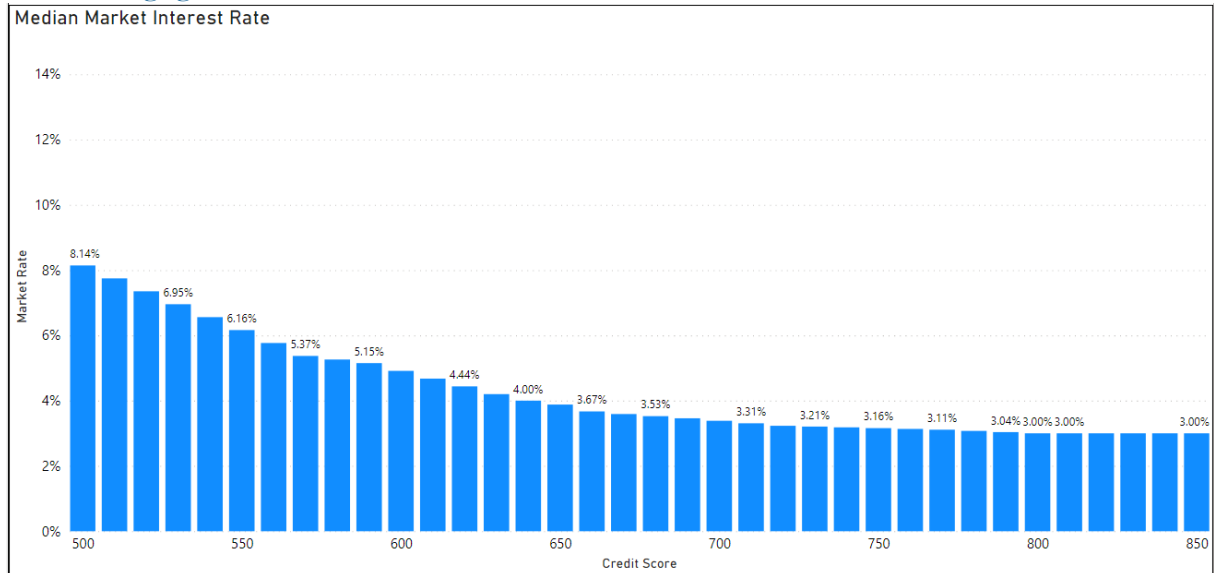
You may not want to see declining net income yields as you go lower in credit tiers. It is important to keep proper spreads between credit tiers.



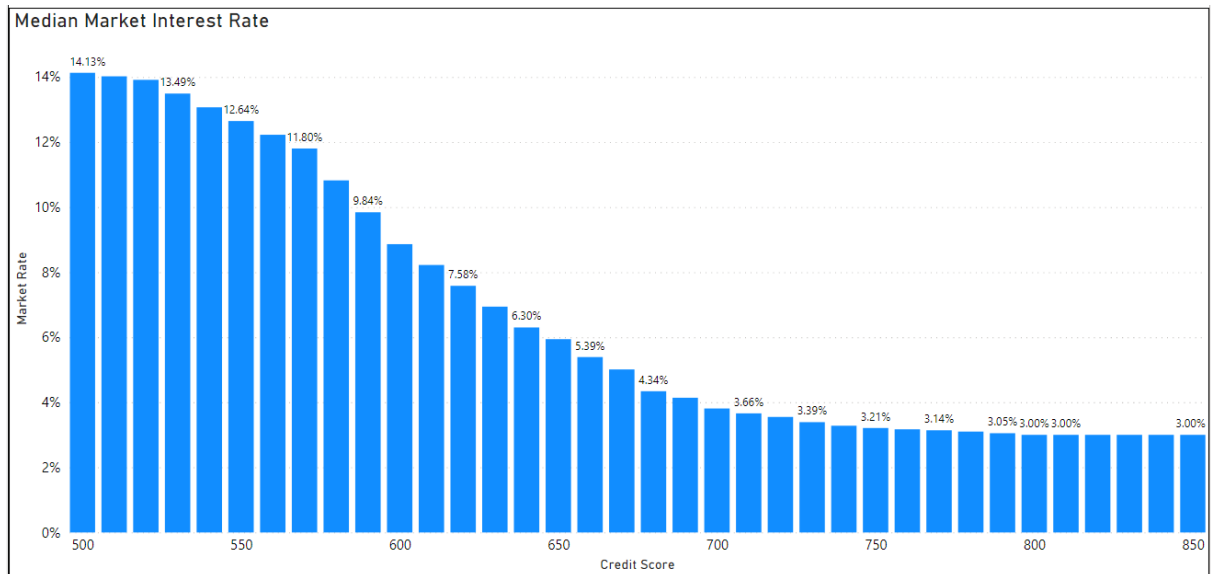
RISK BASED LENDING

Real estate secured loans have a flatter credit risk curve than consumer loans. This is due to government intervention and the historical differences in depreciation and appreciation of the secured assets.

1st Mortgage 30 Year Fixed



Used Auto 60 Month Fixed



RISK BASED LENDING (CONT.)

Charging off a loan does not necessarily mean a net loss on the loan when interest earned is included. Especially in lower credit tiers where larger amounts of interest are paid.

RISK BASED LENDING (CONT.)

Example:

Auto Loan, 100% LTV, 72 Month Term, Recovery From Car Based On Depreciation Schedule and Repo & Sales Cost (Minimum \$1,000)

Credit Tier	New Auto		Used Auto	
	A+	D	A+	D
Annual Interest Rate	3.24%	7.83%	3.45%	9.31%
Month Interest Earned is Greater Than Amount Charged Off - Minimum Payments	29	22	24	16
Month Interest Earned is Greater Than Amount Charged Off - With Prepayments	17	8	15	5

RISK BASED LENDING (CONT.)

Original loan-to-value may have minimal impact on the net amount of loss when including interest earned.

RISK BASED LENDING (CONT.)

Example:

Used Auto Loan, 3.45%, 72 Month Term, Recovery From Car Based On Depreciation Schedule and Repo & Sales Cost (Minimum \$1,000)

Original LTV	100%	120%
Month Interest Earned is Greater Than Amount Charged Off - Minimum Payments	24	37
Month Interest Earned is Greater Than Amount Charged Off - With Prepayments	15	13



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WOULD YOU LIKE TO KNOW MORE?

Loan Pricing & Profitability
Easy and affordable CECL Solution
IRR/ALM Outsourced Solution
Third Party Review/Validations
Interactive Peer Analysis

PLEASE CONTACT US

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