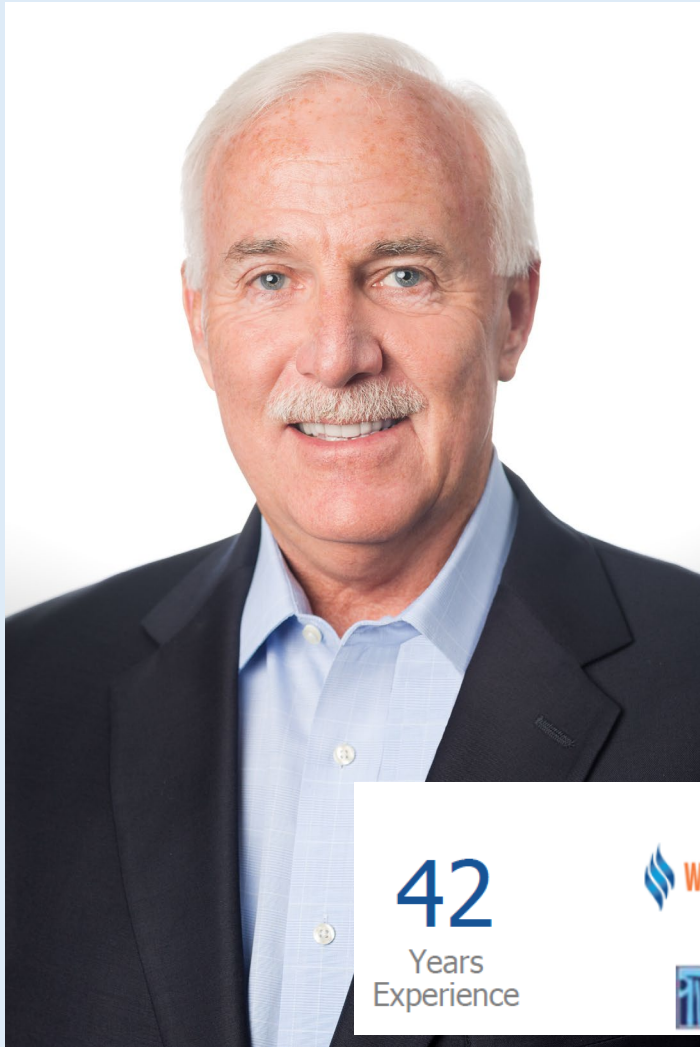


Rev Up Your Auto Loan Profitability



John Flynn

Chairman/CEO

Open Lending Corporation

Specialized **Lending Enablement Platform** for the **Near-Prime Market**
Powered by **Proprietary Data, Advanced Decisioning Analytics,**
an **Innovative Insurance Structure** and **Scaled Distribution**

42

Years
Experience



- Previously the CEO at Washington Gas Light Federal Credit Union and the co-founder of Objective Advisors
- EY Entrepreneur of the Year 2019 Award Winner in Central Texas

State of the Auto Lending Market

Auto NCOs (net charge offs) of 1.18% were down 225bps YoY and 53bps sequentially - given deferral programs and a strong increase recovery rates to near some of the highest rates we've seen since 2000

- Extensions and Stimulus played large part in this recovery

Jefferies Auto Credit Monitor

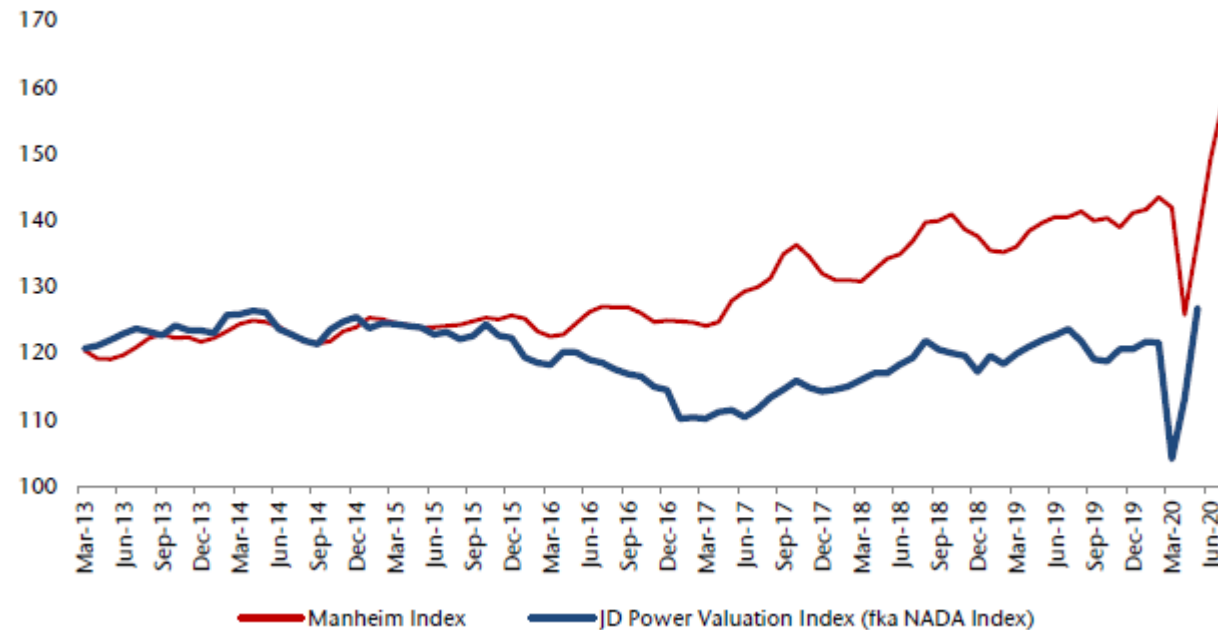
	Most Recent Month (July)	Year-ago Period	Long-term Average	3-month Rolling Average
Total DQs (%)	4.43%	8.54%	7.44%	4.73%
NCOs (%)	1.18%	3.43%	3.46%	2.22%
Recovery Rate (%)	57.65%	45.81%	43.74%	45.91%

Source: Jefferies, company data

State of the Auto Lending Market Cont'd

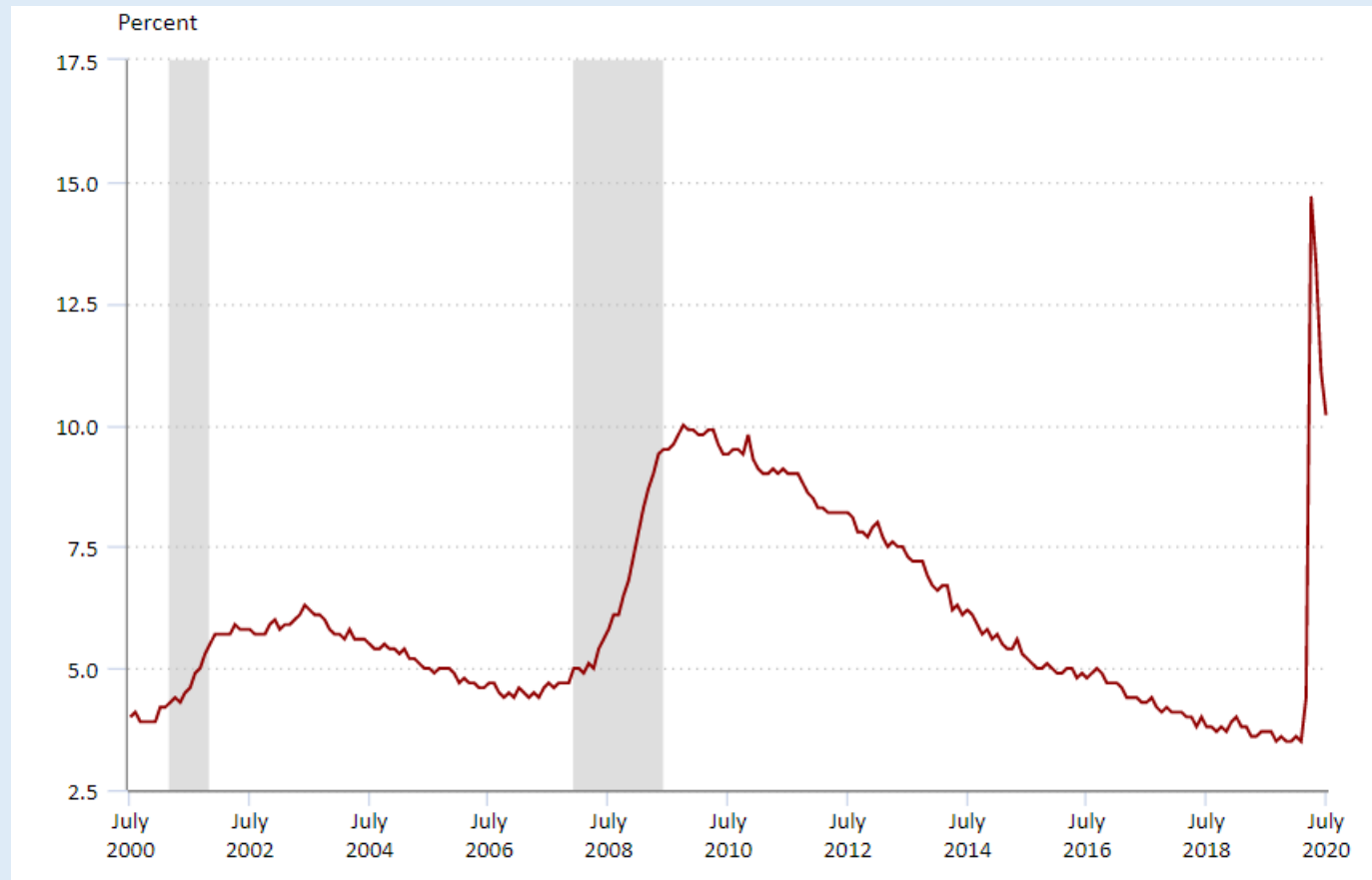
The Manheim Index rose 5.84% MoM in July to another record high of 158.0, and is now up 12.5% YoY, indicating residual values have more than recovered following a substantial decline in April.

Exhibit 28 - Auto Recovery Indices (Trailing 4-years)



State of the Auto Lending Market Cont'd

Unemployment rate quickly reverses and expect 2020 to end up in the 8.5-9.5% range and then slowly taper back to 4-6% range over the following 15-18 months



Today's Agenda

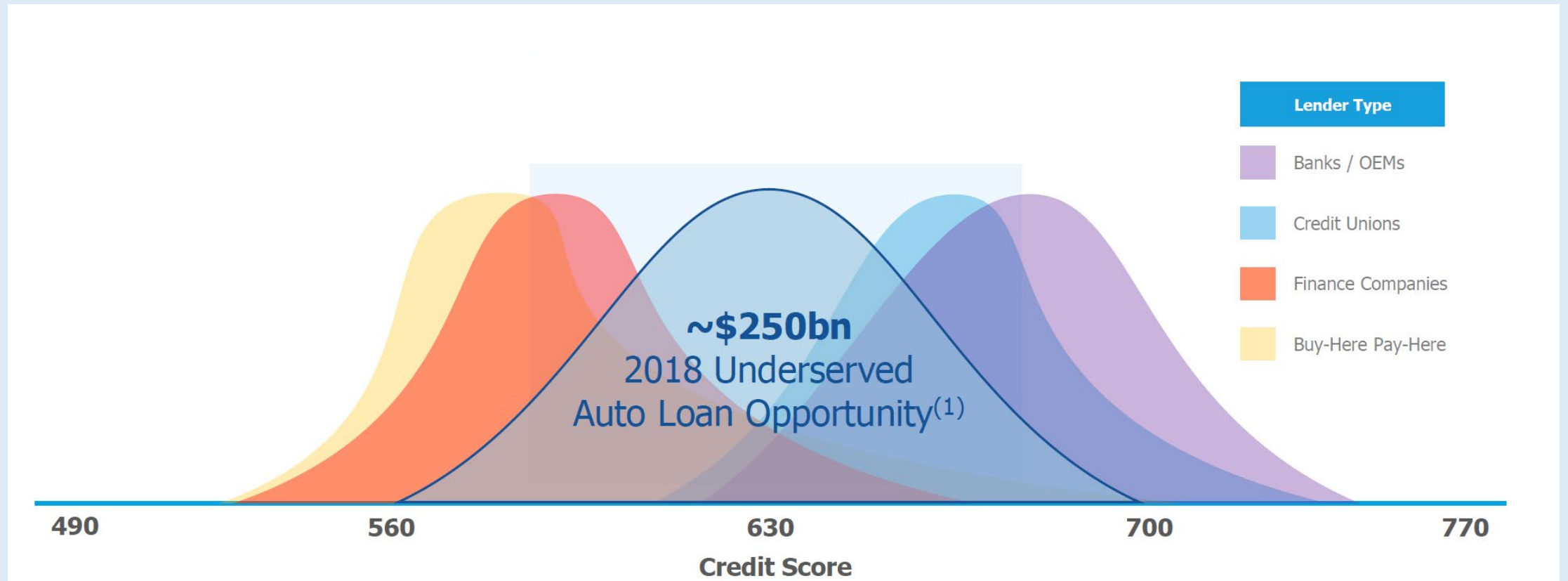


Identify opportunities for Credit Unions to capture more of the auto lending market

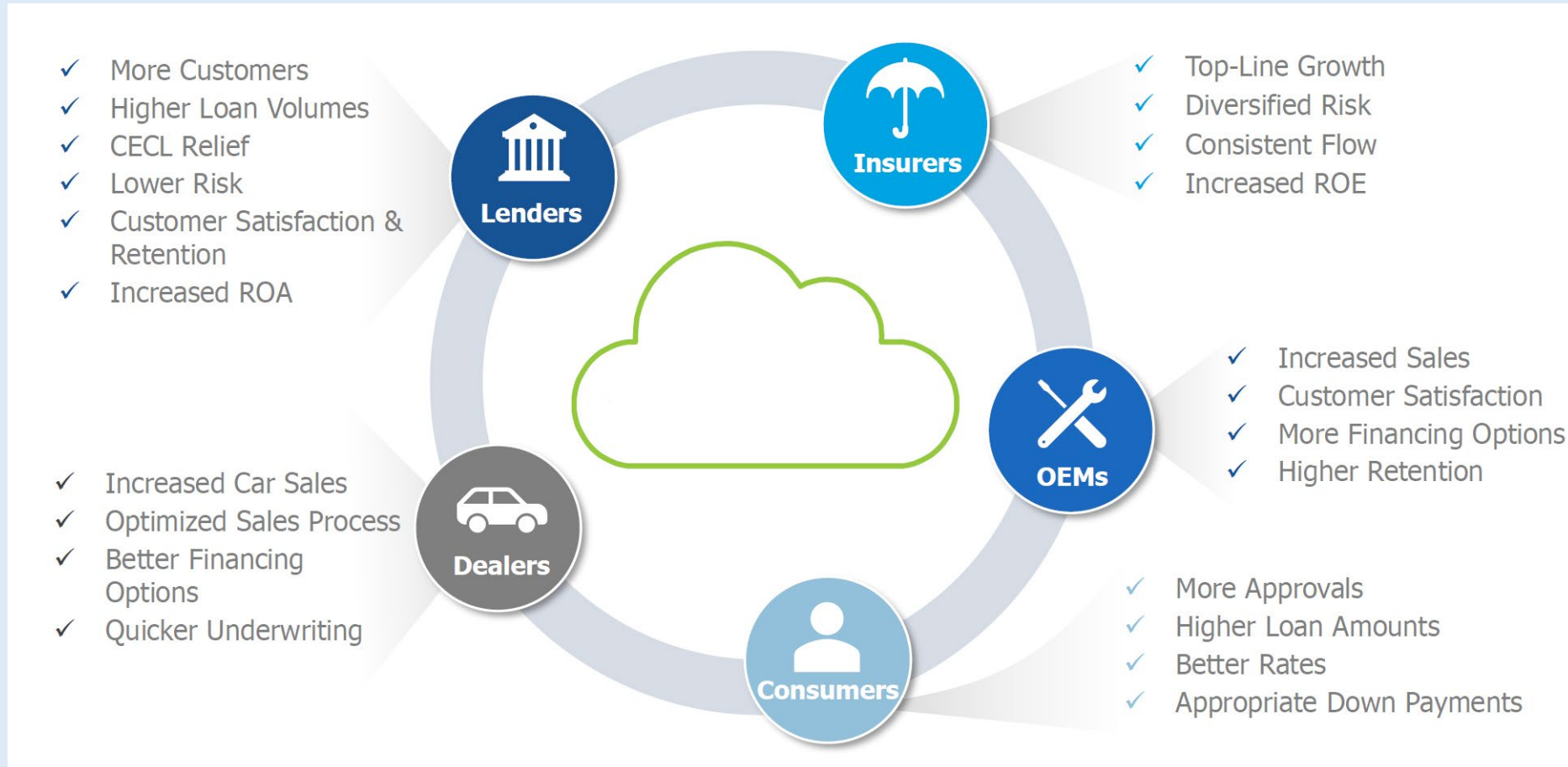


Pricing auto loans competitively using risk-based pricing and various risk attributes

Massive Underserved Population

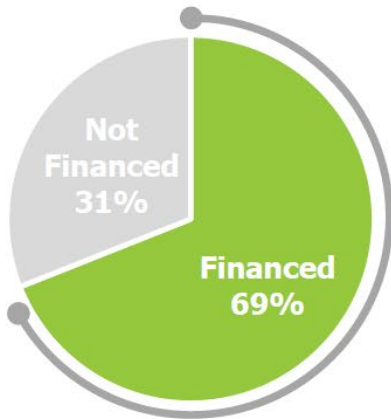


Auto Loan Ecosystem

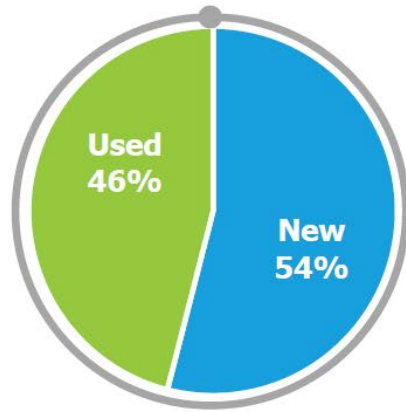


Significant, Underserved Market Segment

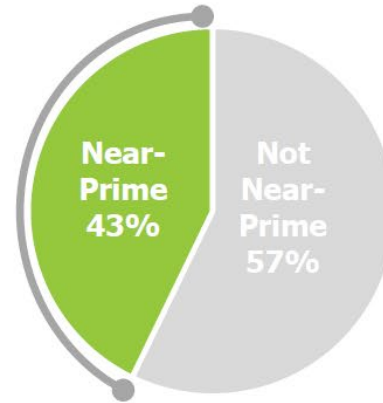
Financing for Auto Purchases



\$584bn loan originations in 2018



Substantial, Underserved Population



Underlying Market





64%

of the time a consumer's preferred **financial institution** wins their purchases



88%

of the time a **credit union member** intends to give them all their future business

Question?



What percentage of your auto portfolio is below a 640 score?



Non-prime members in mind

Actual Average Application LTV's

Retail LTV	≤ 75%	≤ 80%	≤ 85%	≤ 90%	≤ 95%	≤ 100%	≤ 105%	≤ 110%	≤ 115%	≤ 120%	≤ 125%	≤ 130%
Trade LTV	≤ 90%	≤ 95%	≤ 100%	≤ 105%	≤ 110%	≤ 115%	≤ 120%	≤ 125%	≤ 130%	≤ 135%	≤ 140%	≤ 145%
750 +	250	294	384	449	528	571	534	817	192	229	50	93
700 - 749	732	1016	1408	1572	1837	1913	1869	2580	841	1450	171	289
680 - 699	640	953	1248	1587	1888	2011	1861	2713	1083	1872	161	297
660 - 679	872	1175	1657	2047	2331	2681	2677	3950	3455	316	587	
640 - 659	1169	1755	2503	3089	3512	3947	4280	6223	5656	461	854	
620 - 639	1326	1935	2769	3398	4099	4664	4791	7407	6377	497	849	
600 - 619	1278	1917	2674	3344	3916	4404	4647	10659	461	852		
580 - 599	997	1477	2061	2461	2849	3181	3240	6975	312	616		
560 - 579	372	502	723	1052	1257	2696	305	578				

Source: Lenders Protection portfolio of 1.6 million applications over a 10-year period

The Non-prime Members Demographic



Limited Credit Experience



Single major credit problems (usually driven by medical problems or a divorce)



Lack access to money in savings



Typically not rate sensitive



Monthly payment driven

Worth the risk?



Approve and Book more loans



Increase Profitability



Enhance member relationships

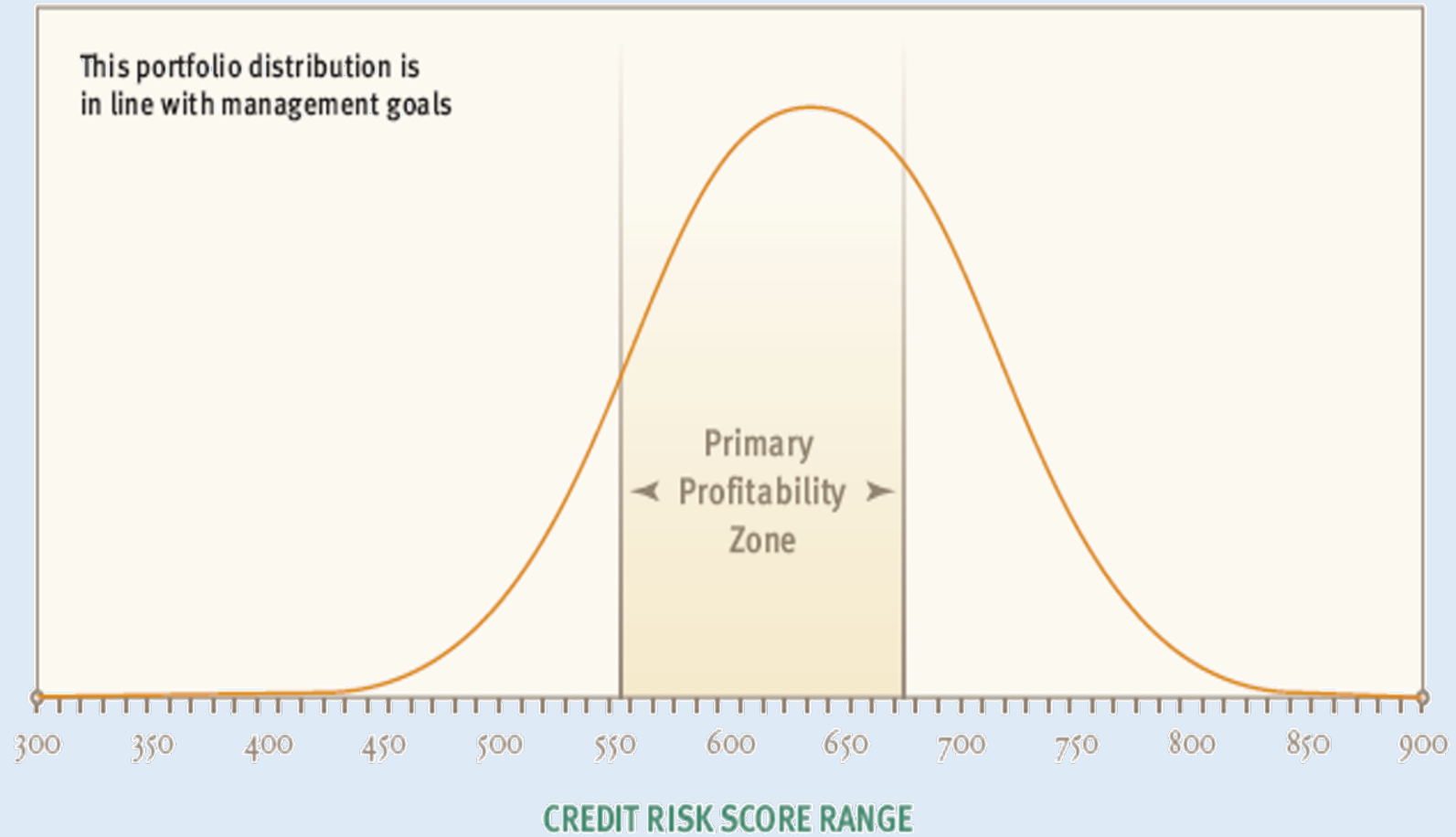


Attract new members



Serve the underserved

Higher Yields



Question?



How do you price for the increased risk?



Interest Rate Pricing Strategies

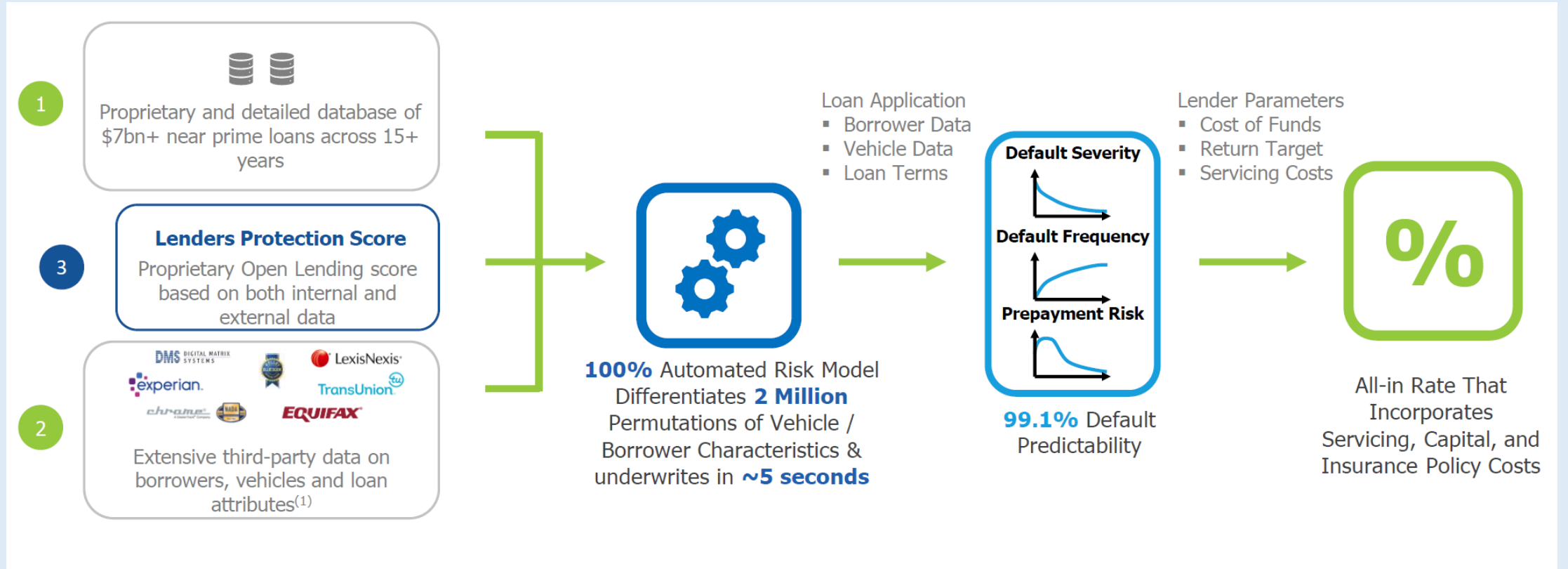
Risk Based Pricing Methodology

Allows lenders to **price individual loans** based on a wide range of characteristics, including credit criteria and many other different risk attributes.

Key Element to true risk-based pricing: ***Takes into account not only probability of defaults, but severity.***



True Risk Based Pricing Components



Find the Highest Default Risk

BORROWER 640 CREDIT UNION	BORROWER 600 CREDIT UNION	BORROWER 560 CREDIT UNION
125% Loan to Value	115% Loan to Value	125% Loan to Value
72 Month Term	72 Month Term	72 Month Term
Used Vehicle	Used Vehicle	Used Vehicle
Indirect Channel	Indirect Channel	Direct Channel
Default Rate	Default Rate	Default Rate

Find the Highest Default Risk

BORROWER 640 CREDIT UNION	BORROWER 600 CREDIT UNION	BORROWER 560 CREDIT UNION
125% Loan to Value	115% Loan to Value	125% Loan to Value
72 Month Term	72 Month Term	72 Month Term
Used Vehicle	Used Vehicle	Used Vehicle
Indirect Channel	Indirect Channel	Direct Channel
18%	26%	24%

Question?



Do you incorporate severity of loss in your interest rate calculations?



Some vehicle makes and models cause much higher losses

Depreciation Speed and Severity of Loss

Chrysler

\$25,000 loan amount

\$20,000 vehicle value

10% Interest Rate

Defaults in month 13

Depreciation rate 72%

\$20,586.65 Deficiency Balance

\$14,400 vehicle value at default

\$6,186.65 Deficiency After Sale

Toyota

\$25,000 loan amount

\$20,000 vehicle value

10% Interest Rate

Defaults in month 13

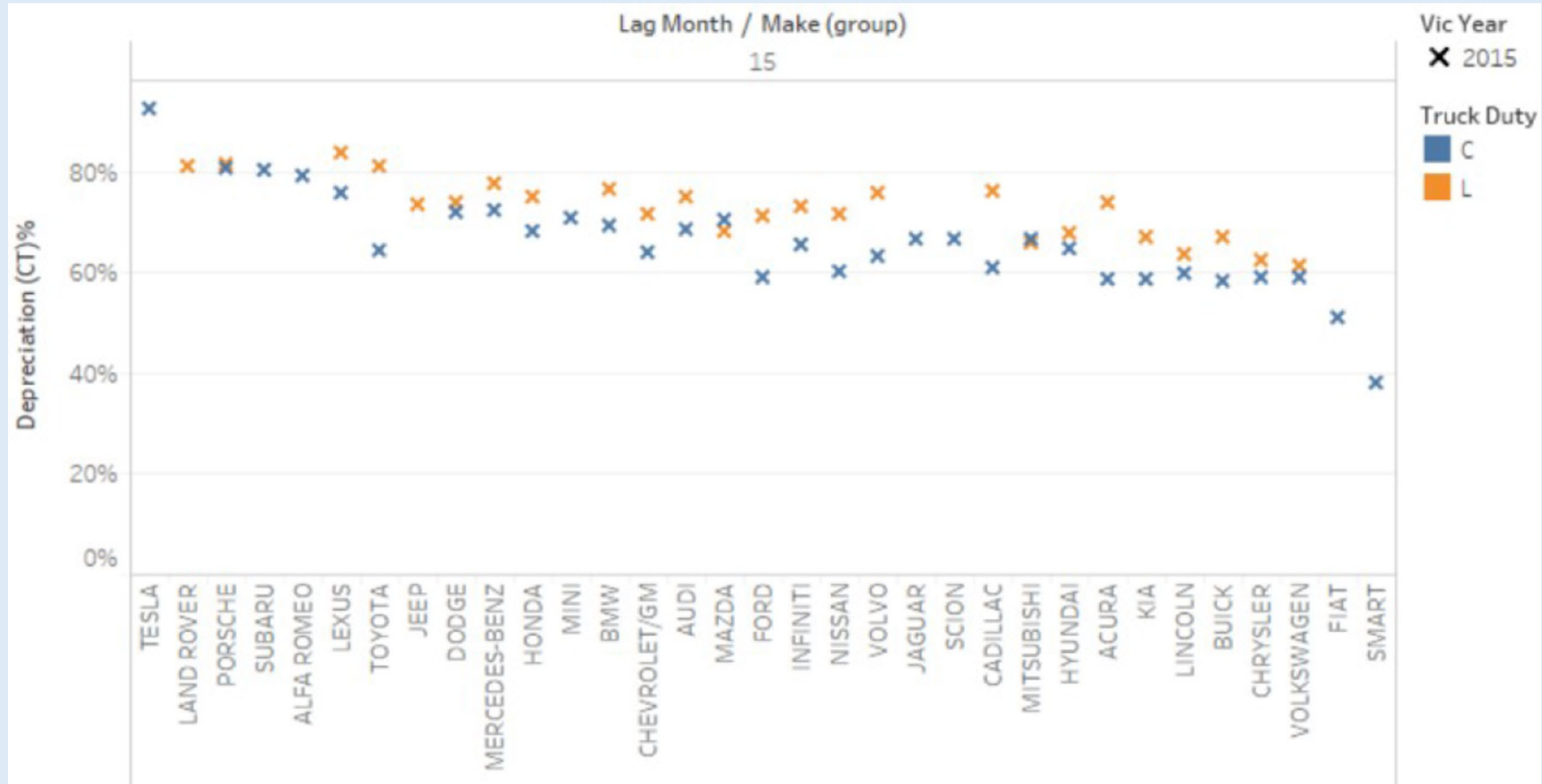
Depreciation rate 82%

\$20,586.65 Deficiency Balance

\$16,400 vehicle value at default

\$4,186.65 Deficiency After Sale

Measure Severity



Risk Based Pricing Model

Results

Origin: INDIRECT | New or Used: USED | Term: 60 | Credit Depth: Select | Update

Contract Rates | Stress Results

LP Score	Depth	Loan to Value										
		0-85	86-90	91-95	96-100	101-105	106-110	111-115	116-120	121-125	126-130	131-135
750+	THICK	7.4%	7.4%	7.4%	7.4%	7.5%	7.7%	7.9%	8.1%	8.5%	8.9%	9.5%
	NORMAL	7.6%	7.6%	7.6%	7.6%	7.7%	8.0%	8.3%	8.7%	9.1%	9.7%	10.4%
	THIN	7.8%	7.8%	7.8%	7.8%	8.0%	8.3%	8.7%	9.1%	9.7%	10.4%	11.3%
700-749	THICK	7.6%	7.6%	7.6%	7.6%	7.6%	7.9%	8.1%	8.4%	8.8%	9.3%	9.8%
	NORMAL	7.8%	7.8%	7.8%	7.8%	7.9%	8.3%	8.6%	9.0%	9.5%	10.1%	10.8%
	THIN	8.0%	8.0%	8.0%	8.0%	8.3%	8.6%	9.0%	9.5%	10.1%	10.8%	11.7%
680-699	THICK	7.8%	7.8%	7.8%	7.9%	8.1%	8.4%	8.8%	9.1%	9.6%	10.1%	10.7%
	NORMAL	8.0%	8.0%	8.0%	8.2%	8.5%	8.9%	9.4%	9.9%	10.5%	11.1%	11.9%
	THIN	8.2%	8.2%	8.2%	8.5%	8.9%	9.4%	9.9%	10.5%	11.3%	12.1%	13.0%
660-679	THICK	8.0%	8.0%	8.3%	8.5%	8.8%	9.2%	9.5%	9.9%	10.3%	10.8%	
	NORMAL	8.3%	8.3%	8.6%	8.9%	9.4%	9.8%	10.3%	10.7%	11.2%	11.9%	
	THIN	8.6%	8.6%	8.9%	9.4%	9.8%	10.4%	10.9%	11.5%	12.1%	12.9%	
640-659	THICK	8.4%	8.5%	8.8%	9.1%	9.5%	9.9%	10.3%	10.7%	11.2%	11.7%	
	NORMAL	8.6%	8.8%	9.2%	9.6%	10.1%	10.7%	11.2%	11.8%	12.4%	13.0%	
	THIN	8.9%	9.1%	9.6%	10.1%	10.7%	11.4%	12.1%	12.7%	13.5%	14.2%	
620-639	THICK	9.1%	9.3%	9.7%	10.1%	10.6%	11.1%	11.5%	12.0%	12.4%	12.8%	
	NORMAL	9.5%	9.7%	10.2%	10.8%	11.4%	12.1%	12.7%	13.2%	13.8%	14.3%	
	THIN	9.8%	10.1%	10.7%	11.4%	12.2%	13.0%	13.7%	14.4%	15.1%	15.7%	
600-619	THICK	9.4%	9.6%	10.0%	10.5%	11.1%	11.7%	12.2%	12.7%	13.2%		
	NORMAL	9.8%	10.0%	10.6%	11.3%	12.0%	12.8%	13.5%	14.2%	14.8%		
	THIN	10.1%	10.5%	11.2%	12.0%	12.9%	13.8%	14.7%	15.5%	16.3%		
580-599	THICK	9.7%	9.9%	10.5%	11.1%	11.7%	12.3%	13.0%	13.5%	14.1%		
	NORMAL	10.1%	10.5%	11.2%	12.0%	12.8%	13.6%	14.4%	15.1%	15.9%		

Default Freq – 11%
Prepay Freq – 44%

Default Freq – 16%
Prepay Freq – 44%

Default Freq – 18%
Prepay Freq – 45%

Risk Based Pricing Model

Origin: INDIRECT | New or Used: USED | Term: 60 | Credit Depth: Select | Update

Contract Rates | Stress Results

LP Score	Depth	Loan to Value										
		0-85	86-90	91-95	96-100	101-105	106-110	111-115	116-120	121-125	126-130	131-135
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	THIN	7.8%	7.8%	7.8%	7.8%	8.0%	8.3%	8.7%	9.1%	9.7%	10.4%	11.3%
700-749	THICK	7.6%	7.6%	7.6%	7.6%	7.6%	7.9%	8.1%	8.4%	8.8%	9.3%	9.8%
	NORMAL	7.8%	7.8%	7.8%	7.8%	7.9%	8.3%	8.6%	9.0%	9.5%	10.1%	10.8%
	THIN	8.0%	8.0%	8.0%	8.0%	8.3%	8.6%	9.0%	9.5%	10.1%	10.8%	11.7%
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	NORMAL	8.0%	8.0%	8.0%	8.2%	8.5%	8.9%	9.4%	9.9%	10.5%	11.1%	11.9%
	THIN	8.2%	8.2%	8.2%	8.5%	8.9%	9.4%	9.9%	10.5%	11.3%	12.1%	13.0%
660-679	THICK	8.0%	8.0%	8.3%	8.5%	8.8%	9.2%	9.5%	9.9%	10.3%	10.8%	
	NORMAL	8.3%	8.3%	8.6%	8.9%	9.4%	9.8%	10.3%	10.7%	11.2%	11.9%	
	THIN	8.6%	8.6%	8.9%	9.4%	9.8%	10.4%	10.9%	11.5%	12.1%	12.9%	
640-659	THICK	8.4%	8.5%	8.8%	9.1%	9.5%	9.9%	10.3%	10.7%	11.2%	11.7%	
	NORMAL	8.6%	8.8%	9.2%	9.6%	10.1%	10.7%	11.2%	11.8%	12.4%	13.0%	
	THIN	8.9%	9.1%	9.6%	10.1%	10.7%	11.4%	12.1%	12.7%	13.5%	14.2%	
620-639	THICK	9.1%	9.3%	9.7%	10.1%	10.6%	11.1%	11.5%	12.0%	12.4%	12.8%	
	NORMAL	9.5%	9.7%	10.2%	10.8%	11.4%	12.1%	12.7%	13.2%	13.8%	14.3%	
	THIN	9.8%	10.1%	10.7%	11.4%	12.2%	13.0%	13.7%	14.4%	15.1%	15.7%	
600-619	THICK	9.4%	9.6%	10.0%	10.5%	11.1%	11.7%	12.2%	12.7%	13.2%		
	NORMAL	9.8%	10.0%	10.6%	11.3%	12.0%	12.8%	13.5%	14.2%	14.8%		
	THIN	10.1%	10.5%	11.2%	12.0%	12.9%	13.8%	14.7%	15.5%	16.3%		
580-599	THICK	9.7%	9.9%	10.5%	11.1%	11.7%	12.3%	13.0%	13.5%	14.1%		
	NORMAL	10.1%	10.5%	11.2%	12.0%	12.8%	13.6%	14.4%	15.1%	15.9%		
	THIN	10.6%	11.0%	11.8%	12.8%	13.8%	14.8%	15.8%	16.6%	17.6%		

Default Freq – 10%
Prepay Freq – 46%

Default Freq – 17%
Prepay Freq – 42%

Interest Rate Components

Base Target Yield	
Cost Of Funds	1.00%
Servicing	1.10%
Target ROA	2.60%
Target Yield:	4.70%
Risk/Cost Factors	
Premium/Tax	3.47%
Program Fee	1.65%
Origination Costs	1.15%
Uninsured Loss	0.80%
Suggested Rate:	11.8%

Find the Highest Default Risk

BORROWER
580
CREDIT UNION
95% Loan to Value
72 Month Term
Used Vehicle
Thick File
Default Rate

BORROWER
600
CREDIT UNION
110% Loan to Value
60 Month Term
New Vehicle
Normal File
Default Rate

BORROWER
580
CREDIT UNION
115% Loan to Value
72 Month Term
Used Vehicle
Thin Channel
Default Rate

Find the Highest Default Risk

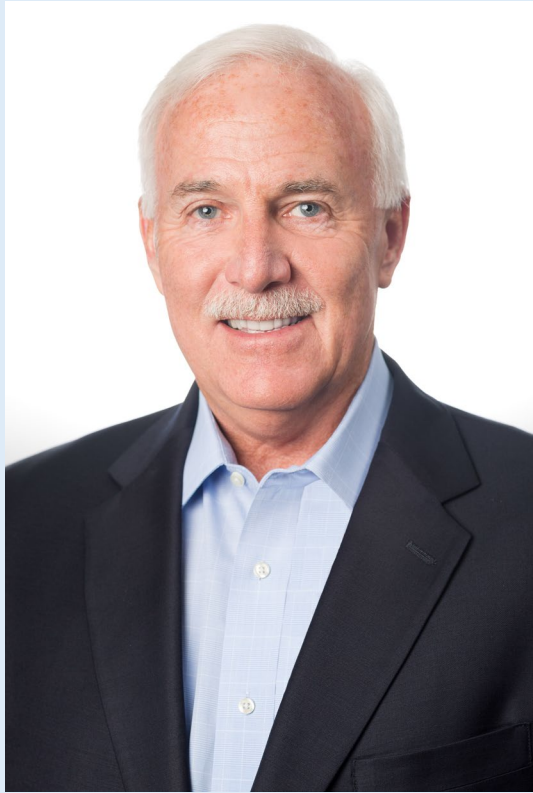
BORROWER 580 CREDIT UNION	BORROWER 600 CREDIT UNION	BORROWER 580 CREDIT UNION
95% Loan to Value	110% Loan to Value	115% Loan to Value
72 Month Term	60 Month Term	72 Month Term
Used Vehicle	New Vehicle	Used Vehicle
Thick File	Normal File	Thin Channel
15%	33%	32%

Key Takeaways

Accurately pricing risk ensures the long-term viability of an institution's ability to withstand the unpredictability of the economy and provide an advantage over competition.

By building an auto portfolio whereby each loan is priced appropriately for risk, the overall net yields are much higher and loan volume increases without having to cut interest rates to the bone.

One of the strongest arguments for having a risk-based pricing model is to facilitate restructuring in ways that **are "win-win" for both the institution and its members.**



Thank you!

jflynn@openlending.com