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SEE Action Loan Performance—Findings

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For ACEEE Finance Forum

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Agenda

- Introduction
- Descriptive statistics
- Performance statistics
- Comparators



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Introduction



Project overview

- **Motivation:** Capital market stakeholders are generally unfamiliar with efficiency loans. No comprehensive, loan-level analyses of the financial performance of energy efficiency loans are available.
- **Objective:** Make publicly available, for the first time, a comprehensive analysis of energy efficiency loan performance data (e.g., rate of nonpayment and delinquency) from multiple state programs.
- **Expected impact:** Increase investor confidence in energy efficiency loans and increase availability of capital at better terms for efficiency financing programs.

Portfolios studied

- CT Smart-E loan—*Energy efficiency loans only*
 - ▣ Total loans: 3,160
 - ▣ Years of data: 2013-2020
- PA Keystone HELP loan
 - ▣ Total loans: 14,753
 - ▣ Years of data: 2006-2017
- Michigan Saves—*Energy efficiency loans only*
 - ▣ Total loans: 16,042
 - ▣ Years of data: 2010-2020
- NYSERDA On-Bill Recovery Loan and Smart Energy Loans—*Energy efficiency loans only*
 - ▣ Total loans: 18,556
 - ▣ Years of data: 2010-2020
- Total observations: 52,511
 - ▣ For some data points (e.g., income), there are fewer observations available



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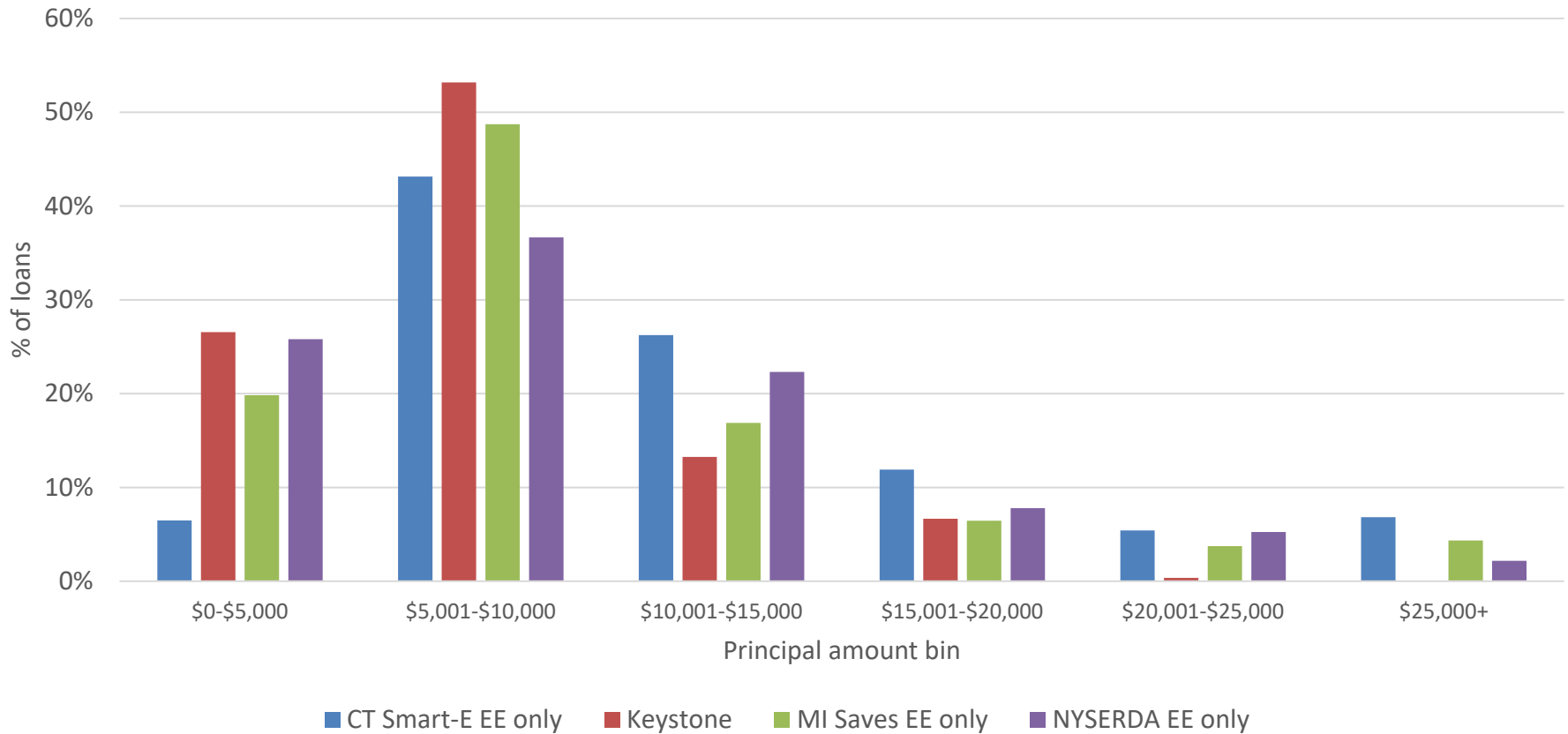


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Descriptive statistics: Loan characteristics



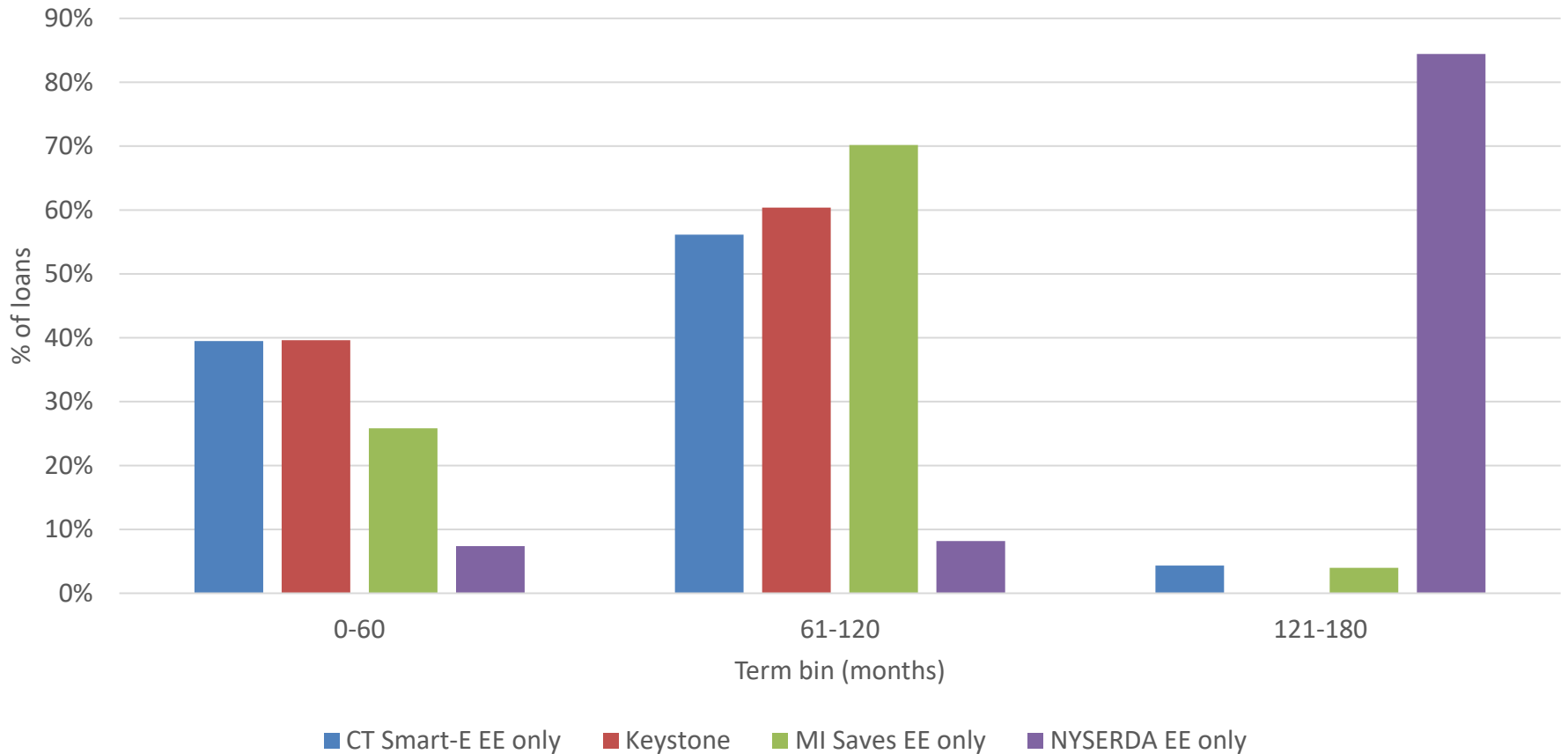
Descriptive statistics—principal amount



□ Average loan across all programs: \$9,137

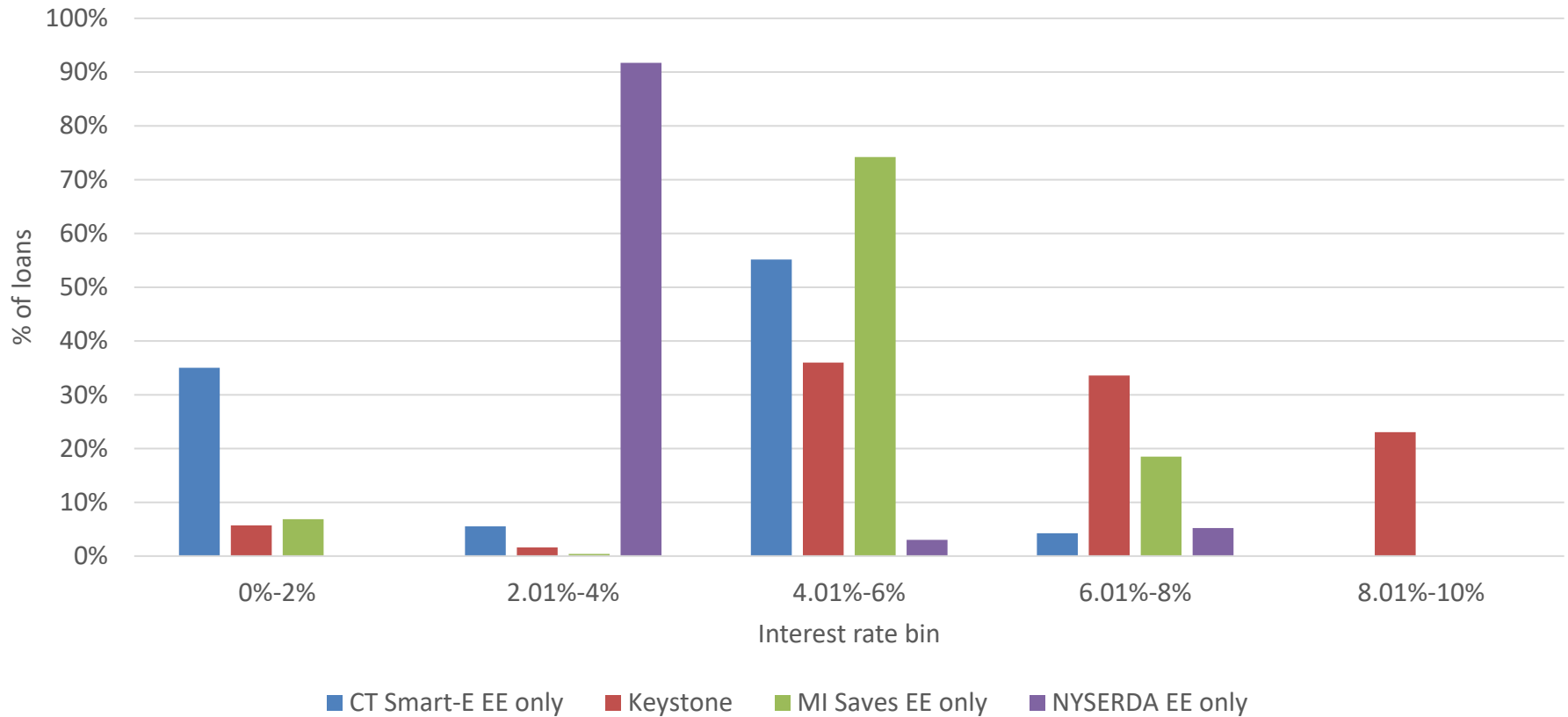
□ Median loan across all programs: \$7,661

Descriptive statistics—loan term



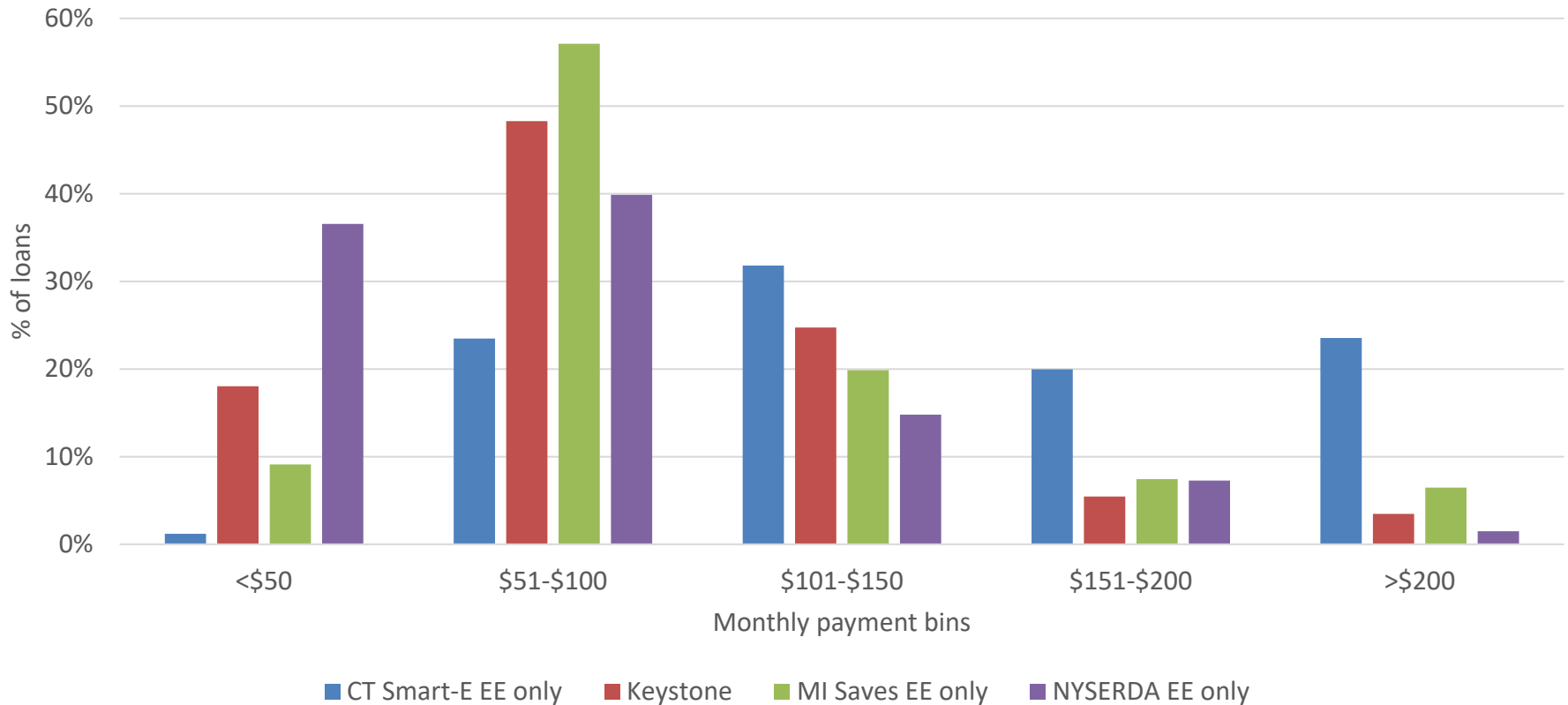
□ Mean and median term is 10 years

Descriptive statistics—interest rate



- Average and median interest rate across programs is 5%
- Across programs, interest rates range from 0% to 8.99%

Descriptive statistics—monthly payments



- Average monthly loan payment across programs is \$93
- Median monthly loan payments across programs is \$80



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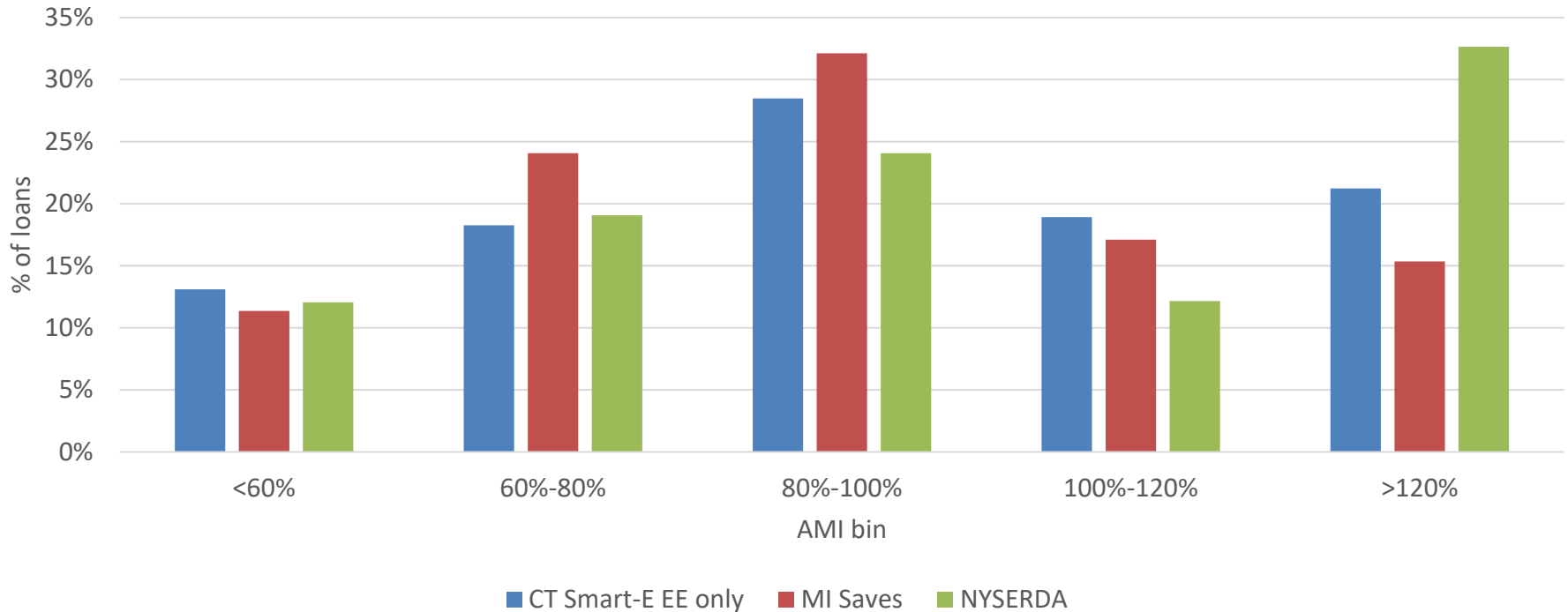


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Descriptive statistics: Borrower characteristics

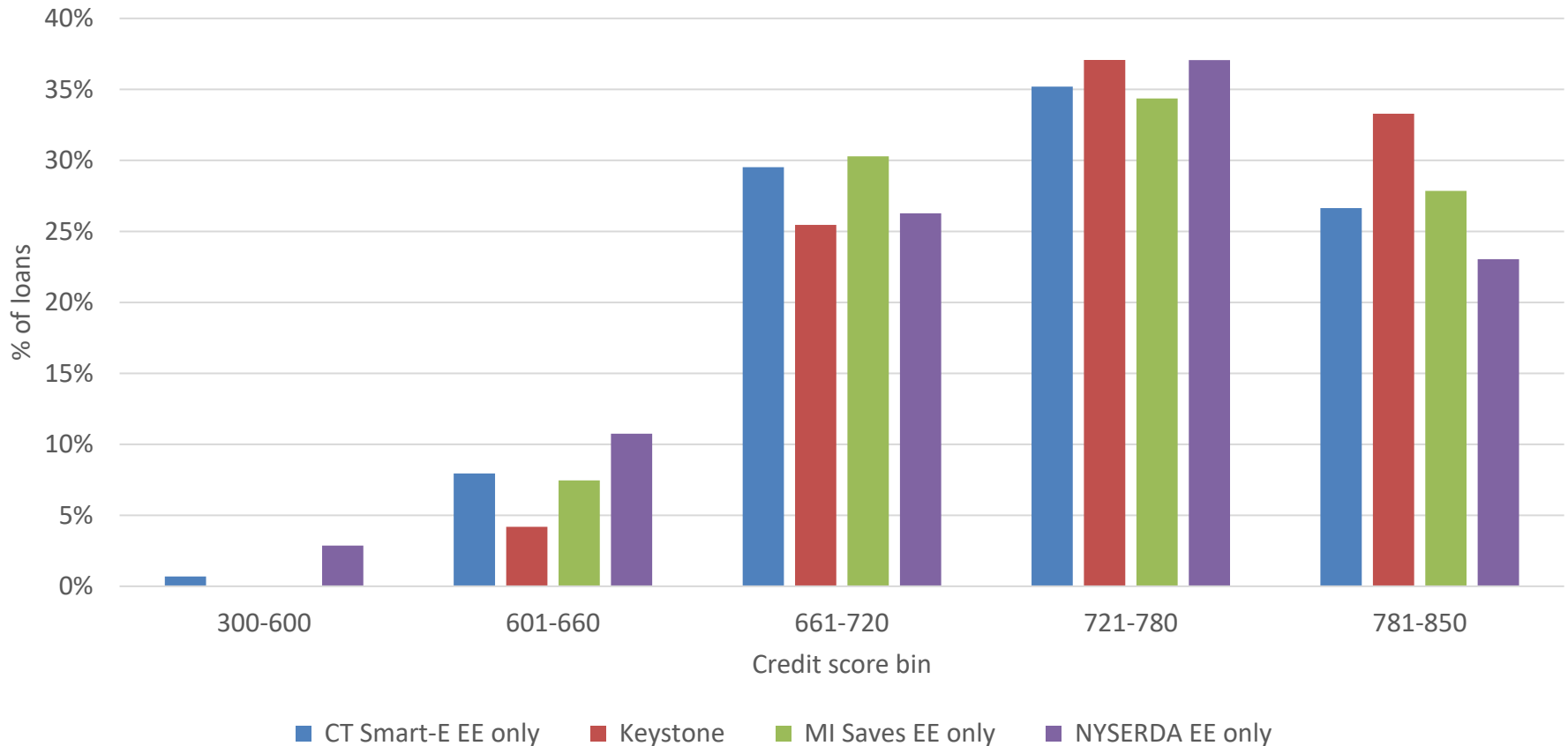


Descriptive statistics—Participant Income



- Data available for 3 portfolios
- Average tract income to average AMI for all programs is 91%
- Median tract income to median AMI for all programs is 88%

Descriptive statistics—credit scores



- Average credit score across all programs: 734
- Median credit score across all programs: 745



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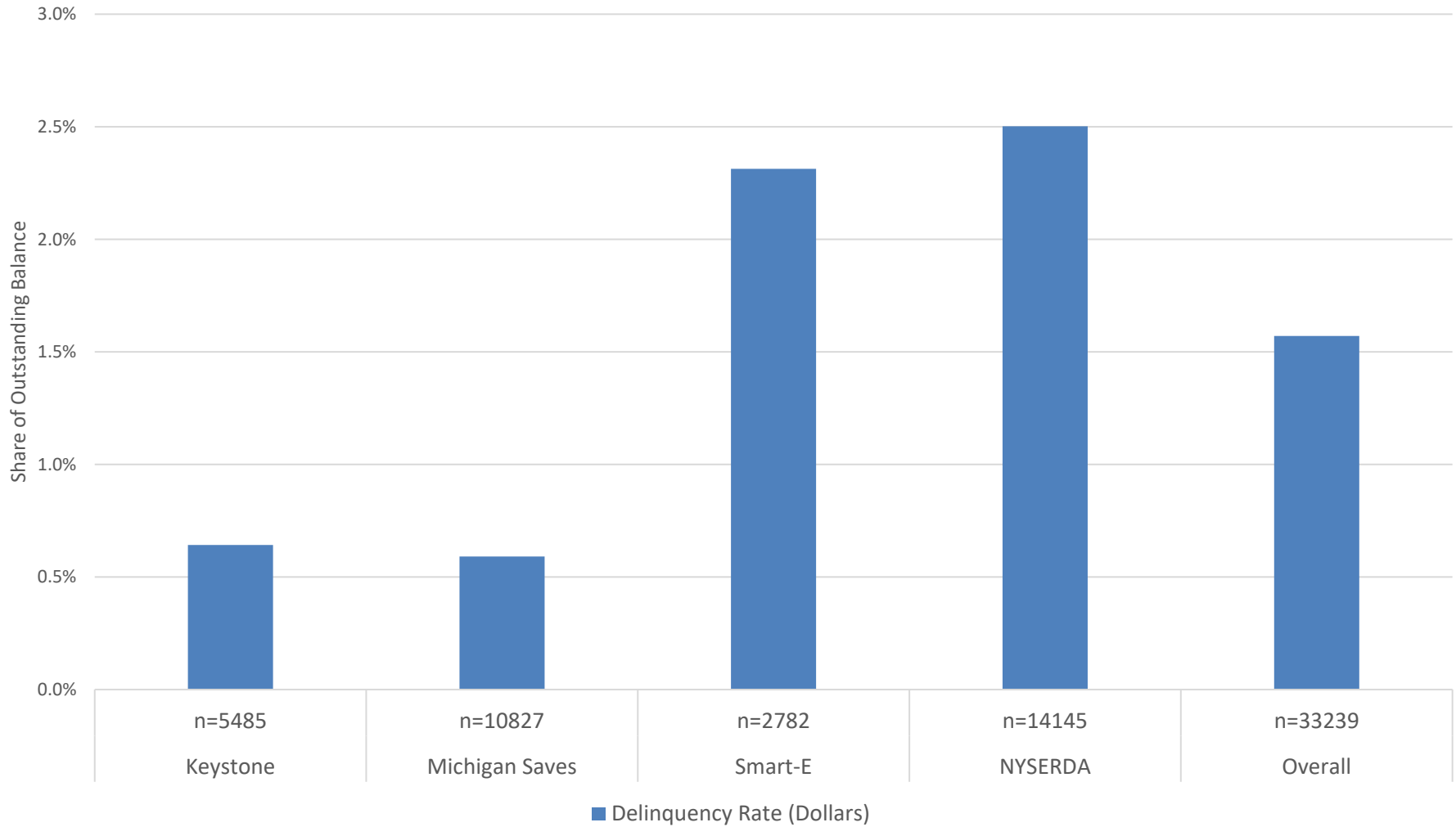


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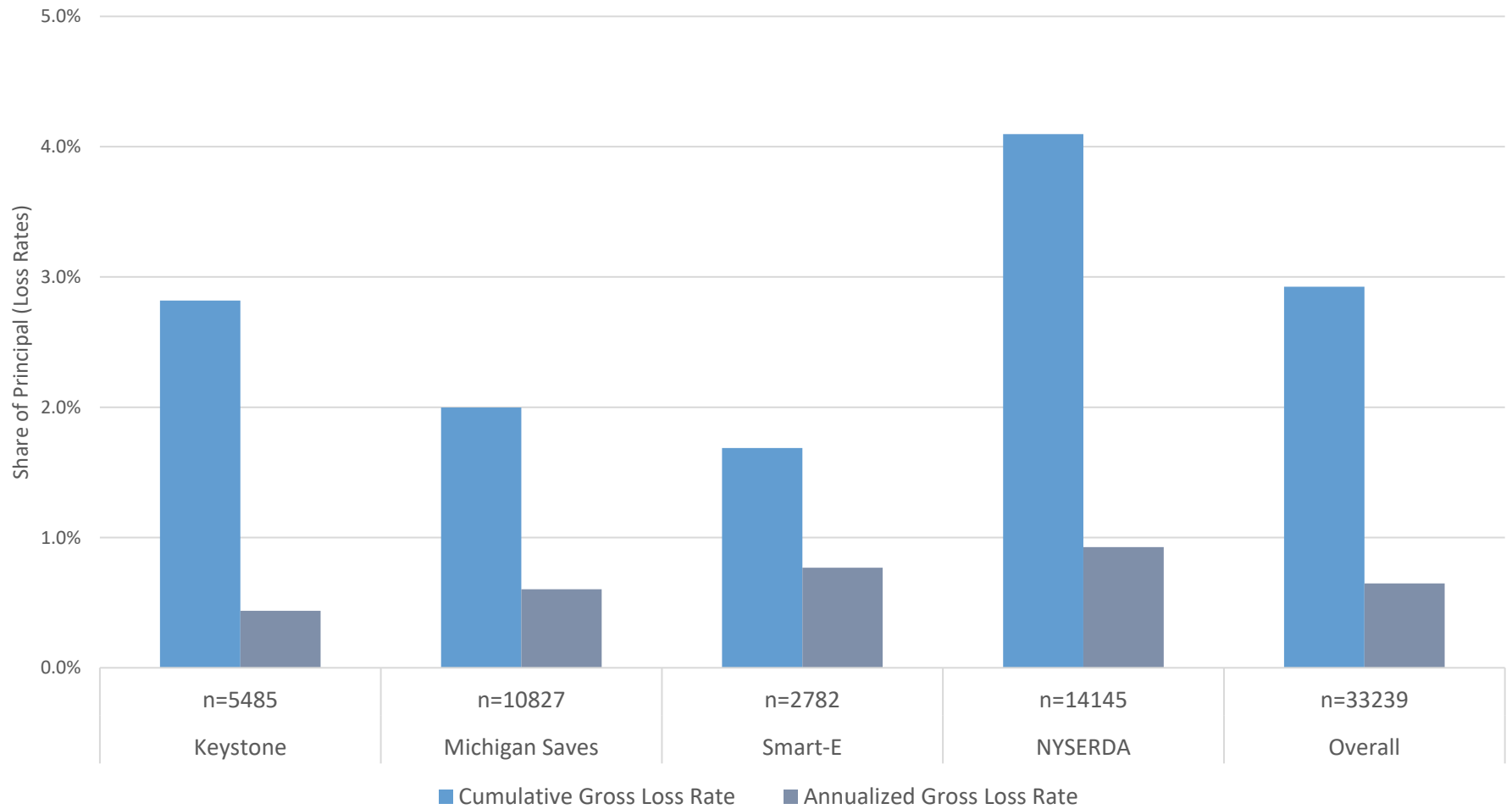
Performance analysis



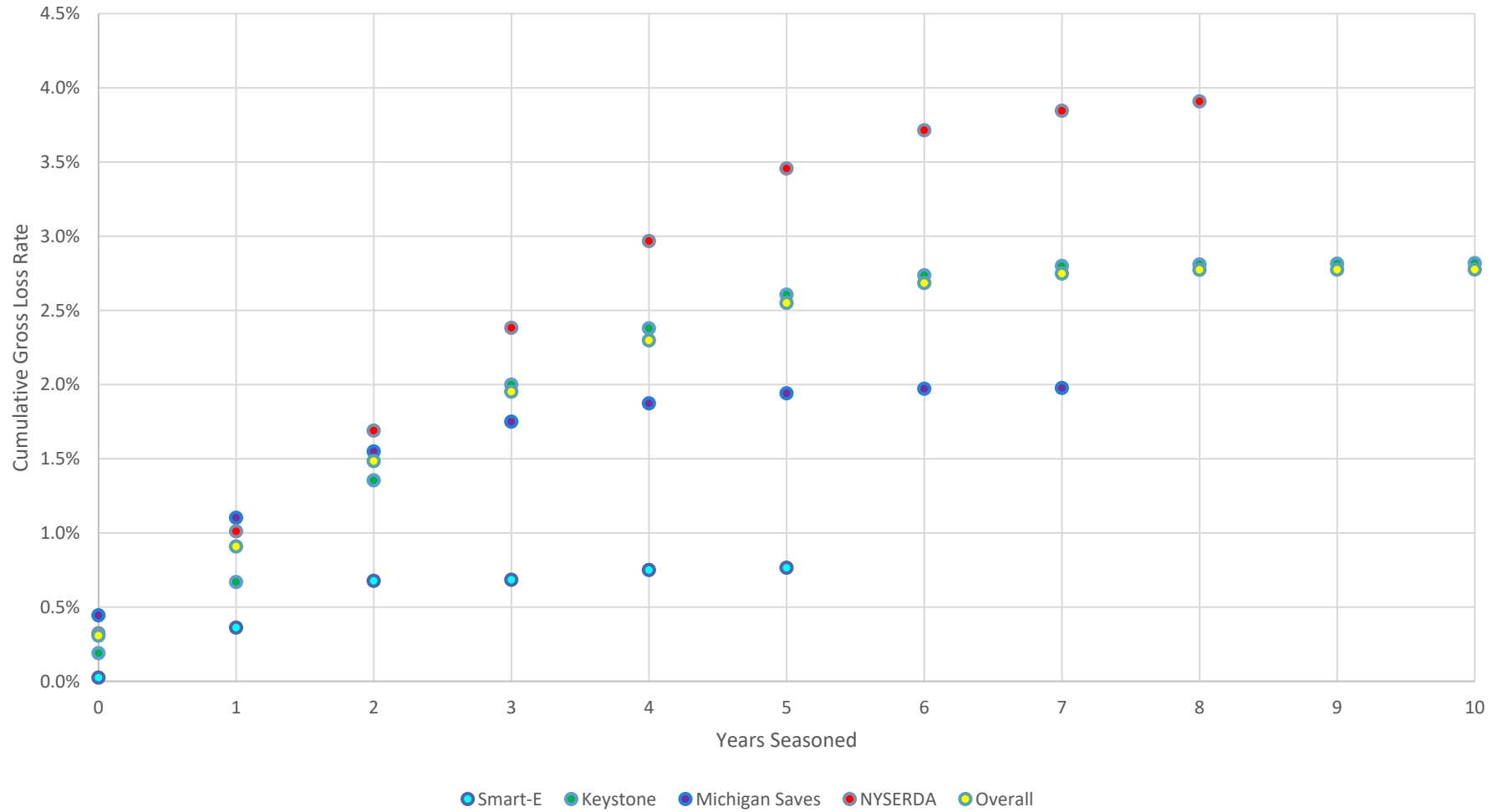
Delinquencies



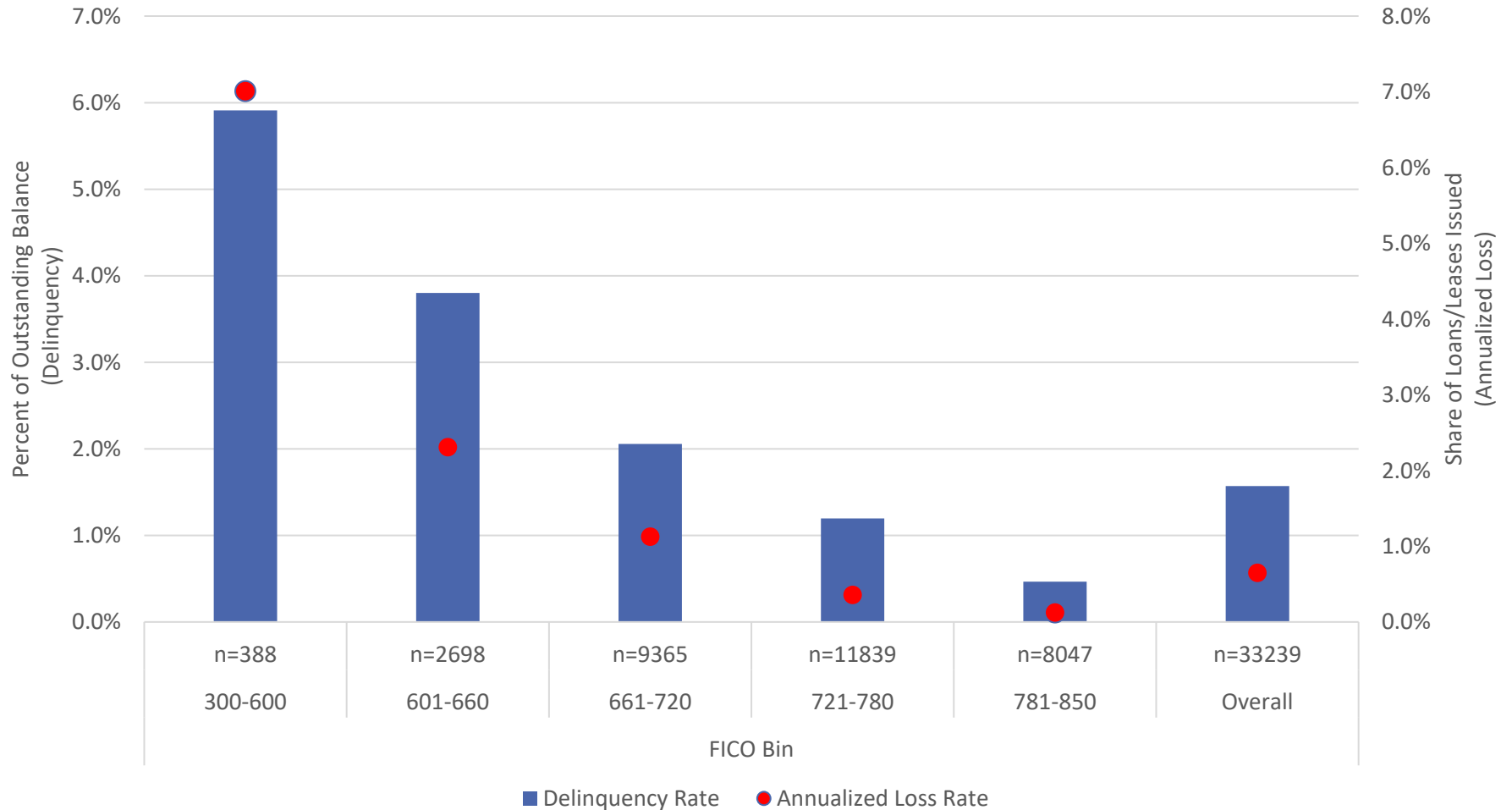
Losses



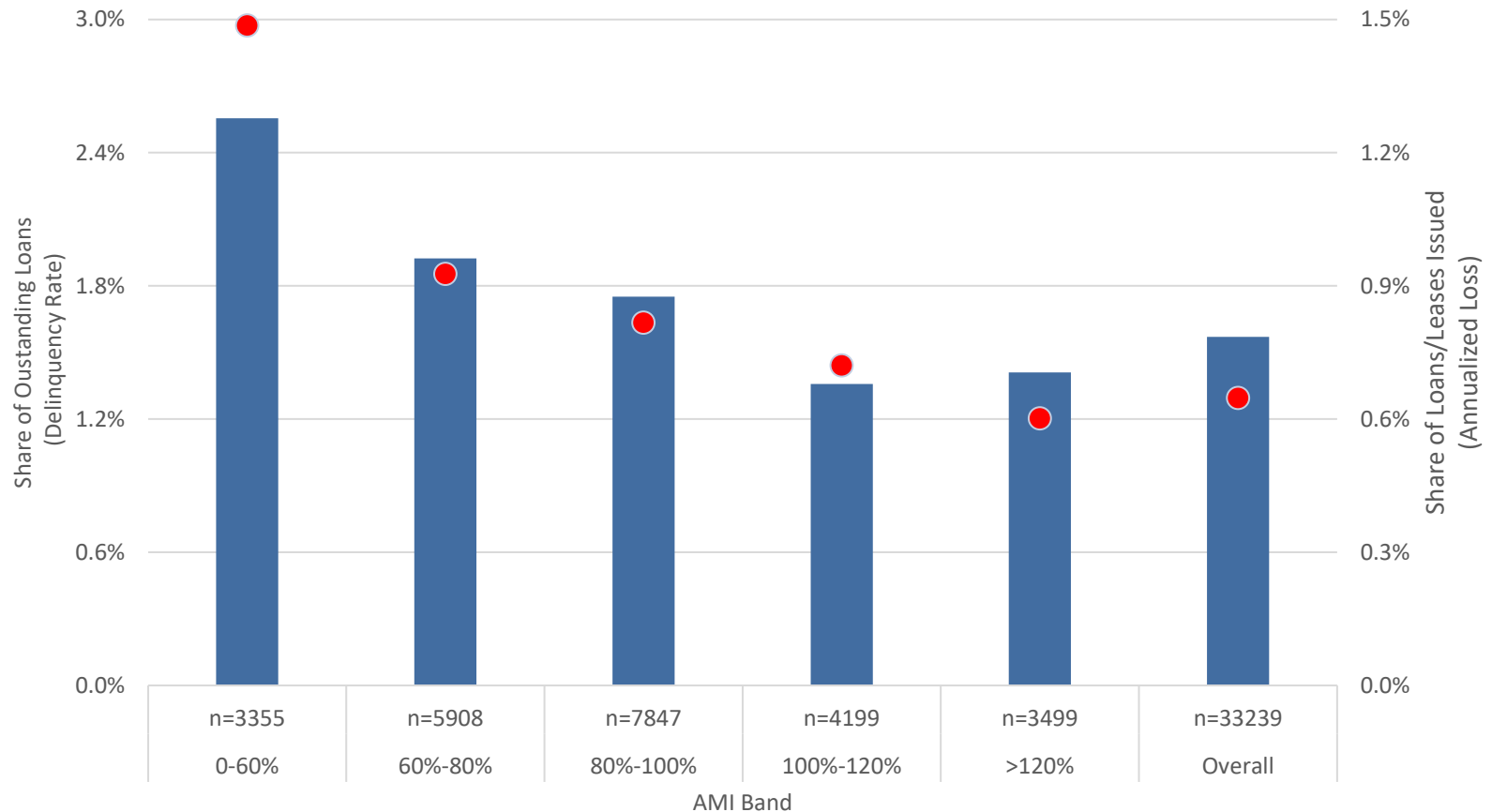
Cumulative gross loss rate



30-day delinquencies and annualized losses by credit score bin



Program delinquencies (30 Day+) and annualized losses by income bins



■ Delinquency Rate (Dollars) ● Annualized Gross Loss Rate



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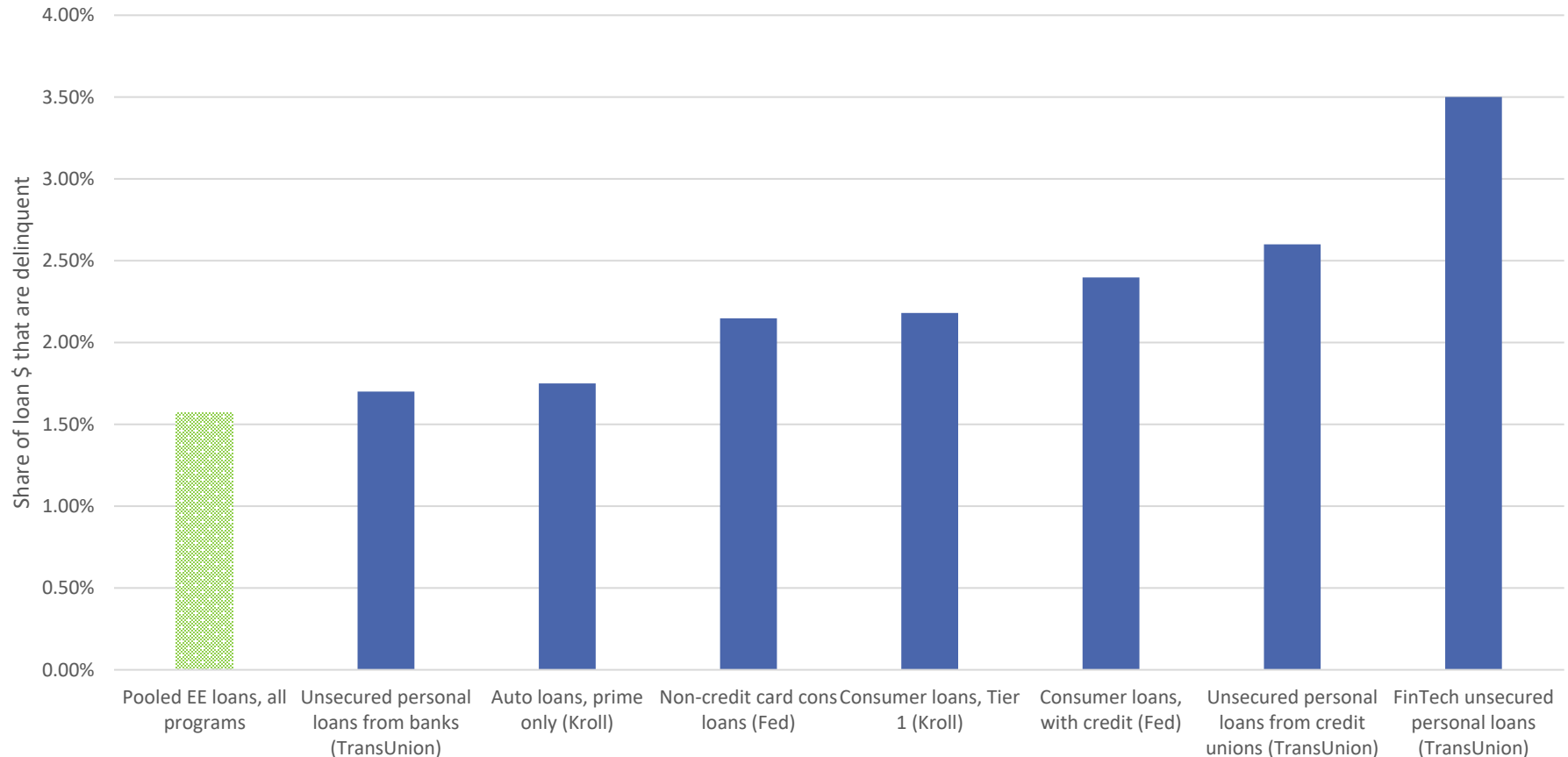


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Comparators

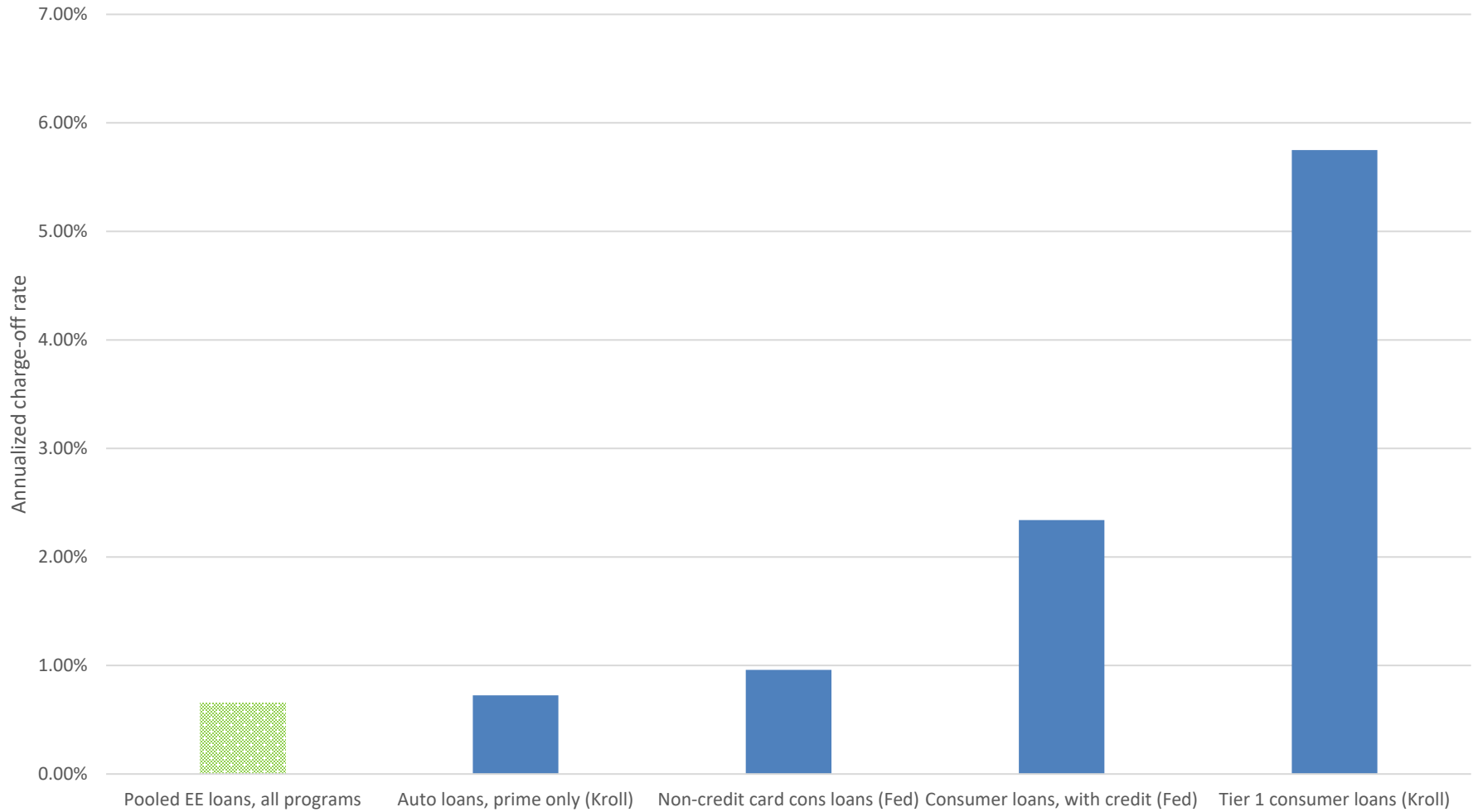


Delinquency rates, EE loans and comparators



- Kroll consumer loan tiers: Tier 1 is deals with average FICO 710-740, Tier 2 averages 680-710, Tier 3 averages 630-660

Annualized charge-offs, EE loans and comparators



Conclusions

- Borrowers are high credit, but not extremely so
- Credit scores are a major driver of performance while some non-credit inputs matter (incomes, interest rates, principal amounts) but only as a second order
- Pooled across the 4 programs, efficiency loans outperform most logical comparators:



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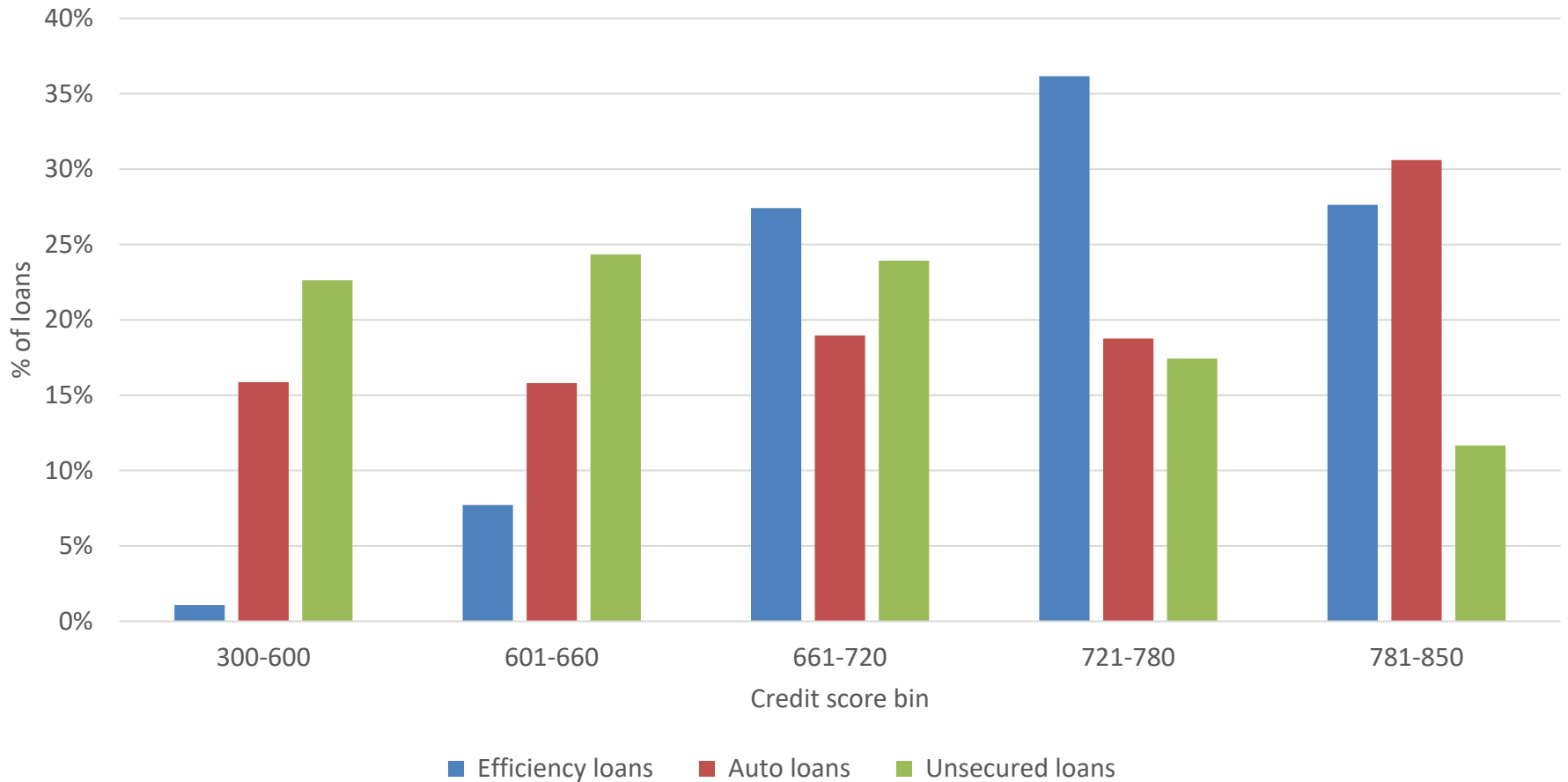
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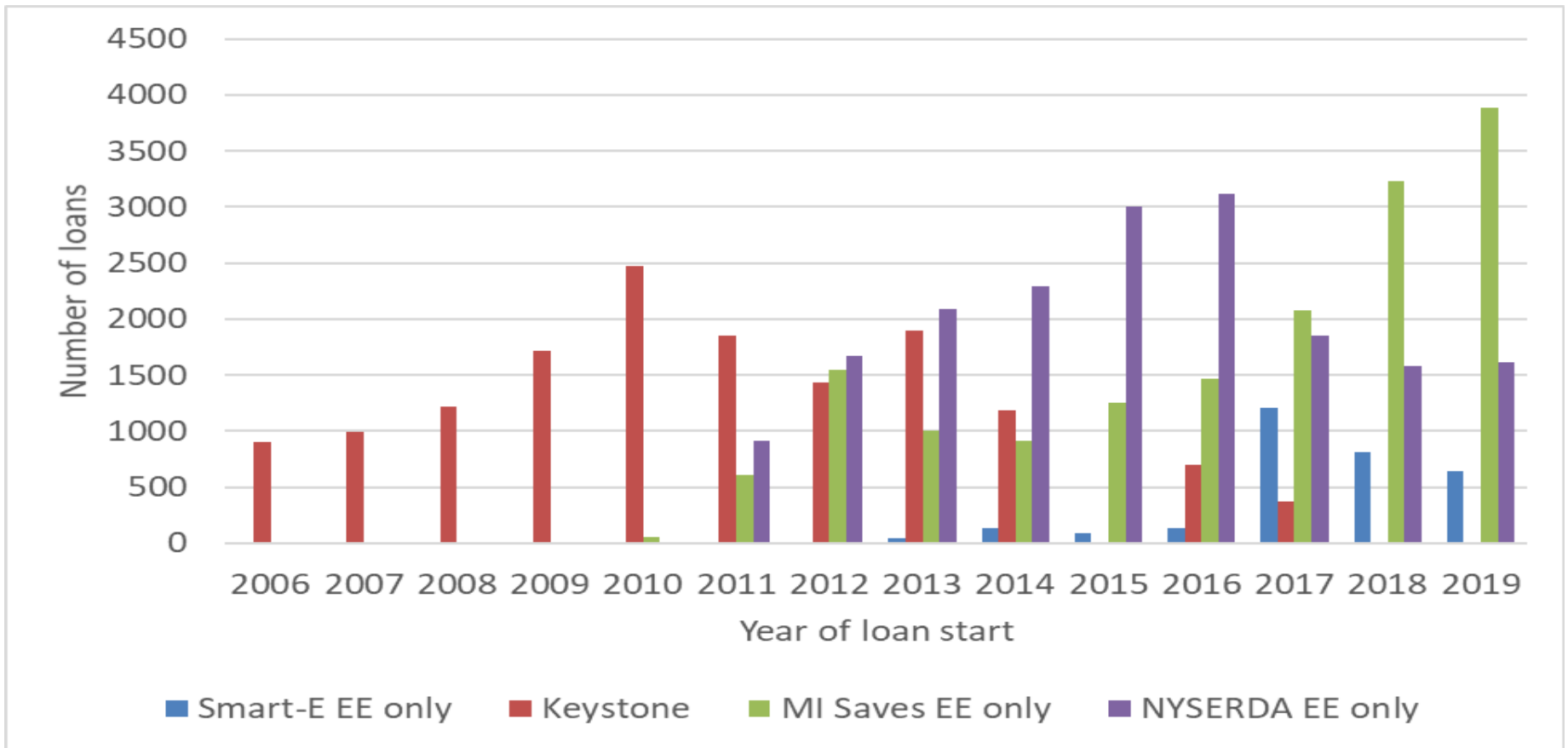
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Descriptive statistics—EE loans compared to other loans



Program volumes by vintage



- Keystone is the only program that spans an economic cycle
- With the exception of Keystone, most volume has been done in recent years