Beyond Conventional Models: Lending by Native Community Development Financial Institutions

Valentina Dimitrova-Grajzl
Peter Grajzl
Joseph Guse
Michou Kokodoko
Laurel Wheeler

Outline

Overview

Data

Findings

Concluding Thoughts

Native CDFIs Fill the Credit Supply Gap

- Credit is necessary for pursuing economic opportunity and enhancing financial security
- Native communities have been underserved by mainstream financial institutions (Listokin et al., 2017; Jorgensen, 2016)
- Approximately 16% of AIAN households have no account with a bank/credit union (FDIC, 2020)
- Native Community Development Financial Institutions (CDFIs) help fill the credit gap in Indian Country (Kokodoko, 2015)

Native CDFIs in Indian Country

- Increasingly important source of credit and financial services
- Serve "low- to moderate-income communities and other distressed markets that are not fully served by traditional financial institutions" (Kokodoko, 2015)
- Native CDFIs predominantly serve AIANNH borrowers
- Have a social and educational mission
- Design services with culture and relationships in mind

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FEDERAL RESERVE BANK of MINNEAPOLIS

Native CDFI Objectives

- Improve financial outcomes
- Promote economic health and social cohesion
- Facilitate capacity- and institution-building

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Anecdotal evidence of success stories

Research Questions

- What are salient features of Native CDFI lending?
- What factors shape performance of Native CDFI loans?
- How relevant are conventional measures of client risk versus alternative metrics?

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- What factors shape performance of Native CDFI loans?
- How relevant are conventional measures of client risk versus alternative metrics?
- We conduct quantitative, loan-level inquiry into the Native CDFI industry
  - 1. Descriptive analysis of loan and client characteristics
  - 2. Identification of characteristics that predict delinquency

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Data Collection and Sampling

- Loan-level data obtained by Oweesta Corp and Sweet Grass Consulting
- Data from 11 Native CDFIs:
  - Representative loan products, portfolio size, and loan disbursement
  - Range of geographic regions
  - Lending volume is 15% of industry total
- Participating Native CDFIs oversampled delinquent loans
  - Our data: 17% (business), 8% (home), 11.5% (consumer)
  - Industry average: 3.9%, 1.8%, and 3.7% (Oweesta, 2021)

Our Dataset Includes

- 2,067 loans (all types) ‣ loan count
- Business, home, and other consumer loans
- Closing dates from 2003 to 2021, most after 2015 ‣ dates
- Active, paid in full, and declared bad debt

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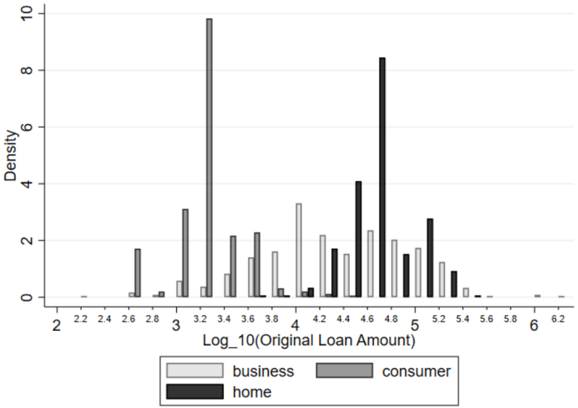
Native CDFIs are Fulfilling their Mission

- Provide a variety of products across different loan categories
  - Business: microloan, vehicle, equipment, etc.
  - Consumer: automobile, employee, credit-builder, etc.
  - Housing: first and second mortgage, construction

Native CDFIs Provide Loans of Different Sizes



Notes: This figure shows the distribution of loan amounts by category

Mean loan amount: $33,672; Median: $5,500

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- Support borrowers in varied circumstances
  - Wide distribution of credit scores, including thin files credit score
  - Credit extended to old and new businesses
  - Borrowers range in age from 18 to 96
  - 50% female and 53% AIANNH

Delinquency Analysis

What are the determinants of loan delinquency among loans issued by Native CDFIs?

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- Why is this question important?
  - Loan delinquency affects CDFI financial viability
  - Delinquency hampers future lending

Delinquency Analysis

- Factors we consider:
  - Credit score ▸ table of means
  - Household income
  - Demographic variables (age, gender, education)
  - Innovative measures utilizing community-specific knowledge and relationships
    - Character score
    - Client engagement
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- We run a series of loan-level regressions

Regression Results

Determinants of Delinquency (Four Bands business loans only)

Explanatory Variables	(1)	(2)
Credit score	-0.0018***	-0.0011
	(0.0006)	(0.0006)
Log household income	0.0452	0.0679
	(0.0600)	(0.0562)
Female	-0.0629	-0.0176
	(0.0825)	(0.0838)
AIANNH	-0.0322	-0.1410
	(0.1460)	(0.1448)
Age of borrower	0.0018	0.0020
	(0.0030)	(0.0029)
Character score		-0.1281***
		(0.0414)
Observations	100	100
R-squared	0.205	0.291

Credit Score: Negatively Associated

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Household Income does not Predict Delinquency

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Additional Regression Results

- Clients that are “somewhat engaged” are less likely to have delinquent loans than unengaged clients
- Don’t find evidence of a relationship between commitment to business and delinquency
- Among consumer loans, household income is negatively associated with delinquency

Summary

- Lending models that incorporate borrower-level information beyond credit score and income may be well-suited for Native CDFIs
- We find evidence that character-based and relationship-based lending might improve loan outcomes

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Some Lessons Learned

- Native CDFIs would likely benefit from:
  - Systematic collection of community-informed data on borrowers
  - Standardized performance measures (McCall and Hoyman, 2021)
  - Consistent reporting of client coaching and advising
- Data recording is costly, and external grant support for data management and staff would be helpful

Ongoing Research Agenda

- This research is part of an ongoing research agenda that seeks to better understand the operations of Native CDFIs
- Studying the link between financial training and loan performance
- Holding listening sessions with dozens of Native CDFIs
- Plan to administer surveys

Thank you!

Questions or comments are welcome: Laurel.Wheeler@mpls.frb.org

Supplemental

Loans by Delinquency and Loan Category

	Business	Home	Consumer	Total
Not delinquent	401	280	1,120	1,801
Delinquent	83	25	147	255
Missing	0	0	11	11
Total	484	305	1,278	2,067

Notes: A delinquent loan is a loan that has been delinquent at any point during the loan process and by any amount. A Not Delinquent loan has never been delinquent. The dataset also has some missing information on delinquency status.

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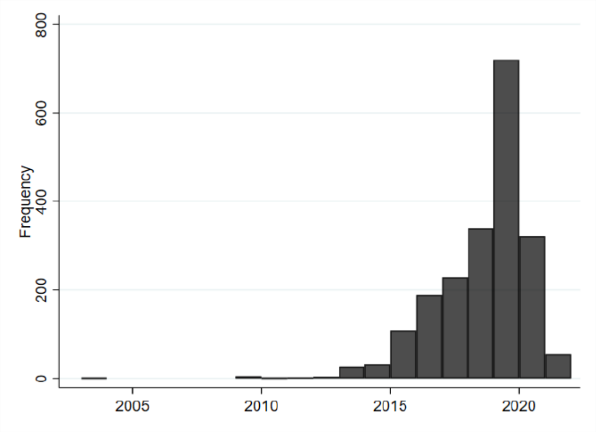
Histogram of Closing Dates for All Loans



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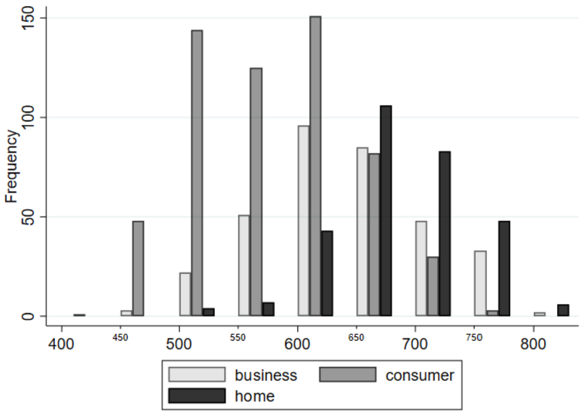
Credit Score by Loan Category



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Delinquency Associated w/ Lower Credit Scores

Credit Score by Loan Category and Delinquency

		Mean	S.D.	Min	Max
Business	Total	649	69.1	468	810
	Not delinquent	661.9	65.8	491	810
	Delinquent	601.0	59.6	468	765
Home	Total	697	54.9	511	814
	Not delinquent	700.9	54.6	511	814
	Delinquent	657.5	41.8	564	814
Consumer	Total	587.2	68.5	445	757
	Not delinquent	588.8	68.2	445	757
	Delinquent	559.1	67.1	467	735

Notes: (n = 1220); Some CDFIs assigned a score of 300 to about 150 other consumer loan borrowers when a credit score was missing. For the purposes of this analysis, we treat those scores as missing.