Data to Advance Economic Access and Justice for Tribes: Patterns of Consumer Credit Use in Tribal Communities

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Each author notes that the views expressed here are theirs and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.
Basic Questions: Is credit usage lower on reservations? If so, why?

• Prevailing view is “Yes, for several reasons.”
  – See 2001 Native American Lending Study
• We give a new look, using credit history data
• We confirm some existing views
  – Use of some types of credit, especially mortgages, is lower on reservations
  – Weaker credit histories contribute to that outcome
• We add some new evidence
  – Bankcard credit access is often lower on reservations and neighborhoods with a high Amer. Indian population
  – Use of auto loans is not lower on reservations
  – Credit scores are associated with credit access on reservations as they are elsewhere, so initiatives to lift scores on reservations have potential to lift access
Q: Is credit usage lower on reservations?

- **Lower than what?**
  - We compare neighborhoods within reservations to neighborhoods nearby but outside reservations

- **By what yardstick?**
  - We use credit history data from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel (CCP)

- **For which reservations?**
  - Federally recognized reservations (ID<5000) in 19 states (AZ, CA, CO, ID, MI, MN, MT, ND, NE, NM, NV, NY, OK, OR, SD, UT, WA, WI, WY)
An Illustration of the Areas We Study: Block Groups Within and Near the Colville Reservation (WA)

Block group boundaries are outlined.

Yellow-green highlights the reservation, which overlaps multiple block groups.

Blue highlights other block groups within 16 km of the reservation.
Our Consumer Credit Data

- Federal Reserve Bank of New York Consumer Credit Panel/Equifax (CCP) credit history data
  - A 5% random sample of Equifax credit files that contain a Social Security number
  - Anonymous but with individual data on risk scores, balances, and delinquencies for most types of credit (1999+)
  - Provides age and location (Census 2000 block group)
  - No information about the individual’s race

- Census 2000
  - Block-group-level demographic and socio-economic data

- Result: Detailed, comprehensive consumer credit data precisely linked to reservation location and Census demographic data—probably the best reservation consumer credit data currently available
Q: Is credit usage lower on reservations?
A: It depends on the type of credit

• Yes, mostly, for real-estate-based loans (mortgages, home equity lines of credit)
  – In 2012, 23% of adults within our reservations had mortgages, compared to 39% nearby (also lower in 2002)

• No, mostly, for auto loans
  – In 2012, 53% of adults within our reservations had auto loans, compared to 40% nearby (also higher in 2002)

• Mixed for other types of credit
  – In 2012 (but not 2002), bankcard and retail credit usage was significantly lower within reservations than nearby; usage of other consumer credit was not significantly different
Q: Is mortgage usage lower on res?
A: Mostly, but to varying degrees by state

Relative Use of Mortgages Within and Nearby Reservations, by State*

*Per capita # of files with first-lien mortgages within reservations, as % of per capita # nearby, by state; blue bars indicate a statistically significant difference. (Authors’ calculations from FRBNY/Equifax CCP data for 2012.)
Q: Is auto loan usage lower on res?
A: Mostly it’s higher, but it varies by state

Relative Use of Auto Loans Within and Nearby Reservations, by State*

*Per capita # of files with auto loans within reservations, as % of per capita # nearby, by state; blue bars indicate a statistically significant difference. (Authors’ calculations from FRBNY/Equifax CCP data for 2012.)
Q: Is bankcard usage lower on res?
A: Mostly, but it varies by state

Relative Use of Bankcard Credit Within and Nearby Reservations, by State*

*Per capita # of files with bankcard balances within reservations, as % of per capita # nearby, by state; blue bars indicate a statistically significant difference. (Authors’ calculations from FRBNY/Equifax CCP data for 2012.)
Within Reservations, Credit Files Are Thinner and Risk Scores Lower

Mean Equifax Risk Scores by Block Group Location (December values for 2002-2012)

Files with No Risk Score (2012)

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Note: Computed using data from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel.
Average Equifax Risk Score Gaps Vary by State

Average Equifax Risk Score nearby reservations minus average Equifax Risk Score within reservations, December 2012. Blue bars indicate a statistically significant difference. (Authors’ calculations from FRBNY/Equifax CCP data for 2012.)
What Explains These Patterns?

• Our analysis cannot fully answer that question
  – The data themselves have limitations
    • Lenders may not know where you actually live
    • Lenders don’t always report or report accurately
    • We deal with joint accounts by dividing them in half
  – Our methods can’t easily separate supply (lender) factors from demand (consumer) factors

• But we can help identify factors to consider—those that are at least statistically correlated with credit outcomes on reservations
Potential Explanatory Factors

• Personal factors—credit history, income, age,...
  – We measure income with block group averages
• Presence/absence of financial institutions
• Place-based factors specific to reservations
  – Trust land, if it impedes mortgage lending
  – Legal system differences on reservations
• Attitudes toward credit may differ between American Indians and other communities
• Racial or other discrimination
  – We use the racial composition of the block group
Credit Scores and Credit Access on Reservations

• Credit risk scores are strongly associated with credit availability both within and nearby reservations
  – We find this very clearly in bank card credit limits, which tend to rise significantly as the individual’s credit score increases

• Other personal factors are linked to credit scores
  – Scores tend to be higher for people who are older, more educated, and have higher income; controlling for these factors, scores are lower in heavily American Indian areas

• Income and education are directly associated with greater credit usage; so is age for bankcard credit and mortgages

• Efforts to boost scores and income may be useful
  – General and personal financial education
  – Addressing issues with IHS billing and medical delinquencies?
  – Overall economic development (and thus income growth)
Hypothetical Example of the Effects of Risk Score and Neighborhood

| Typical Initial Bankcard Credit Limit by Risk Score and Neighborhood Composition |
|-----------------------------------------------|---------------|----------------|
| Typical Credit Limit on First Bankcard        | AI % Where You Live | Increases associated with lower AI% |
|                                               | 100           | 0              |
| Your Risk Score Percentile                     | $619          | $680           |
|                                               | $1,110        | $1,228         |
|                                               | $490          | $548           |
|                                               | $61           | $119           |

Summary of Key Findings

• We substantiate some existing concerns
  – Credit files within reservations are “thinner”
  – Equifax Risk Scores (ERS) are lower within reservations
  – Use of mortgage credit is quite low within reservations

• We add evidence about areas on or near reservations
  – Risk scores are strongly associated with credit outcomes on and near reservations, highlighting the importance of financial literacy
  – Nonetheless, auto lending is not lower on reservations
  – Bankcard access is lower within reservations (and in communities on or near reservations that have a high AI population shares)

• We can only partly explain these patterns
Questions?