Checking Account Activity, Account Costs, and Account Closure in Low- and Moderate-Income Neighborhoods

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Research Presentation at the 2013 Policy Summit on Housing, Human Capital, and Inequality, Cleveland, OH, Sept 19, 2013
Very preliminary; do not cite without authors’ approval

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Summary

This research uses confidential supervisory information for a large random sample of consumer checking accounts at several large depository institutions to:

- Provide evidence about the account fees incurred by checking account customers
- Examine account usage patterns that appear to pose greater account closure risks
- Compare outcomes for customers in low- and moderate-income census tracts to the outcomes experienced by customers residing in higher-income tracts
- Examine the extent to which account-level data explain census tract differences in checking account fees and account closure

Findings for our sample of accounts:

- Average monthly account fees per account are not all that high; but checking account fees are very unevenly distributed across accounts
- Certain types of account-related factors are associated with incurring higher average monthly fees
- Certain types of account-related factors are associated with a higher likelihood of involuntary account closure
- We also find differences, albeit modest in size, in account fees and closure rates that are related to census tract demographic characteristics—characteristics that are similar to those associated with not owning a bank account (being unbanked) or with using transaction and credit services from nonbank alternative financial services (AFS) providers.
Background and Related Research

Concerns about lack of access to mainstream financial institutions

- Bank accounts allow households to build wealth
- Bank accounts give households access to an increasing array of payment products as transaction technologies have evolved
- Bank accounts can help consumers build financial skills
- Services from nonbank alternative financial services (AFS) providers are often viewed as expensive

Evidence about the size of unbanked/underbanked populations

- 8.2 percent of US households do not own a bank account (FDIC 2012)
- Close to half of these “unbanked” households were “previously banked”
- Many previously-banked households cite account costs as a reason why they are no longer banked.
- Many households with bank accounts use AFS services (FDIC 2012)
- For some it may be cheaper or necessary to use AFS credit products even if they have a bank account; that is, to be underbanked (Barr et al. (2009)))
Evidence about who tends to be unbanked or underbanked

- Different data sources yield a fairly consistent set of demographic characteristics associated with being unbanked or underbanked (Barr et al. (2009), McKernan et al. (2009), Rhine et al. (2001), Hogarth et al. (2003), Berry (2004), Avery and Samolyk (2012))
- Unbanked or underbanked households have been found to be disproportionately: lower income, non-homeowners, single headed households with children, in certain minority groups, or without a college degree

Evidence about the costs of bank account ownership

- Overdraft and insufficient funds fees tend to be disproportionately borne by a small segment of account users (FDIC 2008, CFPB 2013)
- Bank fees have tended to have increased as a source of revenues
- Not having a bank account or using nonbank AFS services may be cost efficient for some consumers (Barr et al. (2009), Dunham (2001))
Background and Related Research

More research is needed to understand how the pieces fit together

• Need evidence about the cost of having a checking account
• Need evidence about why accounts close
• Need evidence about bank account usage and outcomes for the types of households that tend to become unbanked or underbanked
  • Ability to maintain “precautionary balances” to avoid account-related fees likely to vary with financial resources
  • Low-balance accounts may be more likely to close
  • However, many account holders do avoid account-related fees and not all accounts that incur account-related fees “fail”—i.e. experience involuntary closure

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Data and Methodology

We use data for a large (>500,000) random sample of checking accounts obtained from a number of large depository institutions

- Link data on census tract characteristics to account-level data
- Classify accounts by their outcome during a 90-day event window
  - Accounts that “fail” (are involuntarily closed) versus accounts that “survive” (remained open) during April - June 2012 (voluntary closures are not included in the analysis)
- Measure average monthly fees, checking account activity and other account relationships during a 12-month period prior to the account closure window

Caveats

- Policies, products, and pricing can vary a lot across depository institutions
  - Our findings may not generalize to checking account holders at other depository institutions
  - This study does not provide statistical evidence about how customer outcomes are related to bank policies, practices, and pricing
- Because of the inherently inter-related nature of checking account activity (e.g. making deposits from other accounts to cover payments), we are estimating reduced-form relationships between account activity and fees that should not be interpreted as causal

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Data and Methodology: Account Information

- Account tenure (months the account has been open)
- Account holder year of birth
- Balances in other accounts
- Deposits and average daily balances
- Customer-initiated account debits (split by debit card and other debits)
- Opt-in status for ATM/debit card overdraft coverage
- Average monthly fees incurred
  - NSF-related fees include: per-item standard overdraft coverage fees, returned-item NSF fees, line of credit fees, linked account overdraft protection transfer fees, Extended overdraft fees, NSF related fee reversals and waivers
  - Other fee categories: ATM fees, monthly maintenance fees, all other usage related fees (such as returned deposit item fees or stop payment fees)

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Data and Methodology: Census Tract Characteristics of Analysis Sample Accounts

- Chosen based on evidence about characteristics that tend to be associated with being unbanked or underbanked:
- Tract income tends to be correlated with other characteristics associated with being unbanked or underbanked

<table>
<thead>
<tr>
<th>Census Tract Characteristics</th>
<th>Median tract income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All income</td>
</tr>
<tr>
<td>Share of accounts in analysis sample (%)</td>
<td>100.0</td>
</tr>
<tr>
<td>Mean for analysis sample accounts:</td>
<td></td>
</tr>
<tr>
<td>Owner-occupied housing units (% of total units)</td>
<td>59.4</td>
</tr>
<tr>
<td>Vacant housing units (% of total units)</td>
<td>9.2</td>
</tr>
<tr>
<td>Single-headed households with children (% of households)</td>
<td>10.9</td>
</tr>
<tr>
<td>Hispanic population (% of total population)</td>
<td>17.5</td>
</tr>
<tr>
<td>Non-Hispanic black population (% of total population)</td>
<td>11.4</td>
</tr>
<tr>
<td>Non-Hispanic white population (% of total population)</td>
<td>62.2</td>
</tr>
<tr>
<td>Has bachelor’s degree (% of adult population)</td>
<td>32.1</td>
</tr>
</tbody>
</table>

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Descriptive Statistics: Accounts in Tracts with Lower Median Income

- Tended to have shorter account tenure
- Tended to have lower balances in other accounts, which to some extent reflects a lower likelihood of having other accounts with the bank
- Tended to have somewhat fewer customer-initiated debits
- Tended to have lower average monthly deposits and lower average daily balances

Average Daily Balances during the 12 months prior to the closure window

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Descriptive Statistics: Average Monthly Fees and Account Closure

- Average monthly fees on a per account basis were around $9 for the analysis sample.
- NSF-related fees tended to account for around 70% of monthly account fees incurred by these accounts.
- NSF-related fees, ATM fees, and maintenance fees per month tended to be higher for accounts in lower income tracts.
- The share of accounts in the sample that were closed tended to be higher in tracts having lower median income.

<table>
<thead>
<tr>
<th>Average monthly fees per account ($)</th>
<th>All accounts</th>
<th>Low income</th>
<th>Moderate income</th>
<th>Middle income</th>
<th>Upper income</th>
</tr>
</thead>
<tbody>
<tr>
<td>All fees</td>
<td>8.8</td>
<td>10.5</td>
<td>10.0</td>
<td>9.0</td>
<td>7.2</td>
</tr>
<tr>
<td>NSF-related fees</td>
<td>6.1</td>
<td>7.3</td>
<td>7.2</td>
<td>6.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Non-NSF-related fees</td>
<td>2.7</td>
<td>3.2</td>
<td>2.9</td>
<td>2.6</td>
<td>2.4</td>
</tr>
<tr>
<td>ATM fees</td>
<td>0.8</td>
<td>1.2</td>
<td>0.9</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Monthly maintenance fees</td>
<td>1.1</td>
<td>1.3</td>
<td>1.2</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Other fees</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Percent of total average monthly fees per account

| All fees | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| NSF-related fees | 69.7 | 69.3 | 71.3 | 71.1 | 65.8 |
| Non-NSF-related fees | 30.3 | 30.7 | 28.7 | 28.9 | 34.2 |
| ATM fees | 8.7 | 11.6 | 9.3 | 8.4 | 7.7 |
| Monthly maintenance fees | 12.4 | 12.3 | 12.0 | 11.8 | 13.8 |
| Other fees | 9.2 | 6.8 | 7.5 | 8.8 | 12.7 |

Involuntary Closure | 1.7% | 3.4% | 2.6% | 1.6% | 1.0%
Account fees are disproportionately incurred by a subset of the accounts in the sample.

Accounts Classified by Average Monthly Fees Paid during the 12 Months Prior to the Closure Window

- No fees paid
- $0-$5
- $5-$10
- $10-$20
- $20-$50
- $50 and above

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Account fees are disproportionately incurred by a subset of the accounts in the sample: NSF-related fees

Average Monthly NSF-related fees incurred during the 12 months prior to the closure window

Accounts classified by census tract median income

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Account fees are disproportionately incurred by a subset of the accounts in the sample: Non-NSF-related fees

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Accounts experiencing involuntary closure tended to have incurred higher monthly fees during the prior 12 months than accounts in the sample that remained open.

<table>
<thead>
<tr>
<th>Average monthly account fees during the 12 months prior to the closure window</th>
<th>All accounts</th>
<th>Remained Open</th>
<th>Involuntary Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average monthly fees per account ($)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All fees</td>
<td>8.8</td>
<td>8.4</td>
<td>30.9</td>
</tr>
<tr>
<td>NSF-related fees</td>
<td>6.1</td>
<td>5.8</td>
<td>25.8</td>
</tr>
<tr>
<td>Non-NSF-related fees</td>
<td>2.7</td>
<td>2.6</td>
<td>5.1</td>
</tr>
<tr>
<td>ATM fees</td>
<td>0.8</td>
<td>0.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Monthly maintenance fees</td>
<td>1.1</td>
<td>1.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Other fees</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
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</table>

Percent of total average monthly fees per account

<table>
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<tr>
<th></th>
<th>All fees</th>
<th>Remained Open</th>
<th>Involuntary Closure</th>
</tr>
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<tr>
<td>All fees</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>NSF-related fees</td>
<td>69.7</td>
<td>68.8</td>
<td>83.6</td>
</tr>
<tr>
<td>Non-NSF-related fees</td>
<td>30.3</td>
<td>31.2</td>
<td>16.4</td>
</tr>
<tr>
<td>ATM fees</td>
<td>8.7</td>
<td>8.9</td>
<td>5.7</td>
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Multivariate Analysis of Average Monthly Account Fees

- Estimated ordered logit regressions explaining likelihood of being in a higher fee group
- Relationships measure marginal “effects” controlling for other factors
- Account activity and account relationship factor are important factors in explaining fees.
  - Factors that were associated with having higher average monthly fees include:
    - Lower average daily balances
    - More customer-initiated debit activity
    - Being opted into overdraft coverage of debit card/ATM transactions
    - Having low balances in a linked savings account (as opposed to having no linked account)
    - Having only one account owner
- Account tenure, account holder age have a nonlinear relationship to fees paid
  - Being young per se is not the issue; it is the account activity associated with being young
- Controlling for account-related factors, certain census tracts characteristics are also associated with paying higher fees; albeit the fee differentials are modest in size
  - Low owner occupancy rates
  - High residential unit vacancy rates
  - High black or Hispanic population shares; lower non-Hispanic white population shares

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Multivariate Analysis of Involuntary Account Closure

• Estimated both logit regression and linear probability models that measure the likelihood of account closure (versus remaining open during the closure window)
• Account tenure is a key factor associated with account closure
• Account-activity and account relationship are important factors in explaining why some accounts were closed:
  – Lower average daily balances
  – Being opted into overdraft coverage of debit card/ATM transactions
  – More debit activity
  – Having low balances in a linked saving account (as opposed to having no linked accounts)
• Account holder age has a nonlinear relationship to fees paid
• Certain census tracts characteristics are also associated with a high likelihood of account closure—albeit the effects are modest in size—including:
  A higher share of single-headed households with children
  A higher black population share
  A lower share of adults having college degrees

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Conclusions

- This research is intended to help fill a void in terms of evidence about checking account costs and closure; particularly among households likely to have fewer financial resources.

- While average monthly fees on a per-account basis are not all that high (less than $9); fees are disproportionately paid by a subset of account holders in our sample--including accounts located in low and moderate income census tracts.

- A large minority of account holders in our sample did effectively receive “free checking” during the 12-month period analyzed (36% of the entire sample paid no fees; among accounts in low-income and moderate-income tracts, 28% and 31% incurred no fees, respectively)

- Differences in consumer outcomes reflect account-related factors:
  - lower average daily account balances
  - Greater debit card activity; being opted into debit card/ATM overdraft coverage
  - having low balances in linked deposit accounts

- Differences associated with tract characteristics and high closure rates among young accounts warrant further investigation

- More data are needed:
  - About account costs and involuntary closures at other institutions
  - About how bank policies, programs and pricing are related to consumer outcomes