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Bouncing out of the banking system: An empirical analysis of involuntary bank account closures

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ABSTRACT

Using a new database, we document the determinants of involuntary consumer bank account closures. During 2001–2005, approximately 30 million debit accounts were involuntarily closed for excessive overdrafting. We focus on multiple factors to explain this phenomenon: household economics and financial decision-making ability, social capital, bank policies, and the alternative financial services sector. Involuntary closures are more frequent in US counties with a larger fraction of single mothers, lower education levels, lower wealth, and higher unemployment. Closures are higher in communities with high property crime rates and low electoral participation. Bank policies have an independent relation to closures, with counties having more competitive banking markets and more multi-market banks experiencing higher closure rates; bank structure also seems to affect the speed at which banks adjust their policies to changes in household income. Finally, using both national data and a state-level shift in regulation, we find evidence that access to payday lending leads to higher rates of involuntary account closure.

1. Introduction

There is substantial policy interest in the extent to which Americans are banked. According to the FDIC's 2009 National Survey of Unbanked and Underbanked Households, 25.6% of Americans are un- or underbanked (FDIC, 2009). A sizeable fraction of these have experienced the involuntary closure of their checking and debit accounts.[1] For example, in 2005 about 6.4 million accounts were involuntarily closed, adding to more than 30 million such closures over the prior 5 years. Virtually all of these closures were due to repeated overdraft or non-sufficient funds (NSFs) activity. While banks routinely honor overdrafts, they typically charge customers "courtesy overdraft fees" that generate substantial revenues. After some number of offenses, however, banks' risk management systems close the accounts of recidivist "bouncers."

Almost all banks report these involuntary closures to a clearinghouse, ChexSystems[SM], which maintains a national database on closure activity. Apart from Jacob et al. (2006), there is no published empirical work on the incidence of involuntary bank account closures. However, virtually every large American bank uses ChexSystems' debit histories to determine eligibility for basic transaction accounts with checking or debit privileges. ChexSystems provides the data; bank practices determine which customers qualify for an account.[2]

Involuntary closure at one institution may lead other banks to deny customers checking or savings accounts,[3] or to offer them only at high cost or with limited service (Lamb and Leonard, 2007; Michael, 2004; Manning, 2000; Beckett, 2000; Caskey, 1994). The consequences of an involuntary closure can follow customers for years after the incident. Often, they may be left with very limited and costly banking alternatives, or with access only to the fee-for-service check cashing or money service businesses.

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[1] Throughout the paper, we refer to "banks," but except where we identify them separately, our analysis also includes depository institutions such as thrifts and credit unions.

[2] Note that some banks (a) choose not to use ChexSystems; (b) limit the time over which they consider an involuntary closure relevant; and (c) offer a restricted product set to consumers with prior involuntary closures. Furthermore, ChexSystems' parent has partnered with the University of Wisconsin Extension to develop a "Get Checking" program, whereby consumers with negative debit events who enroll in a financial education program can be guaranteed an account. To date, 11,000 consumers have completed the program.

[3] For example, in a field experiment conducted by Beverly et al. (2006), the bank denied not only checking but also savings accounts to applicants with prior involuntary closures. In a case study at another bank, Campbell et al. (2007) found that the institution routinely rejected debit applicants with prior debit problems, turning away about 20% of all applicants.

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In short, customers who bounce too many checks can find themselves bounced out of the formal banking system and into the fee-based alternative financial service (AFS) sector. As Desmond and Sprenger's (2007) summary shows, the high costs of these services are compounded by indirect costs resulting from the lack of access to traditional bank accounts and related credit opportunities.

This paper uses a new national database to understand the determinants of involuntary account closure. We match county-level closure statistics over the period 1999–2006 to corresponding demographic, economic, and industry data. While a number of studies examine advanced financial decision-making such as how to allocate funds in a 401(k), we examine a much simpler financial condition: the inability to balance cash flows to avoid recurrent overdrafts.

We posit that involuntary closure is the joint product of behavior by *individuals* and *banks* in the context of a broader *social network* and *financial economy*. First, closures reflect the *consumer behavior* of repeated overdrafts. We consider a number of potential factors influencing this behavior. First, as an economic proposition, overdrafts occur when expenses exceed current income, so we look at the level and volatility of both. We also consider buffer savings and certain family traits as they relate to narrow income–expense margins. We find evidence that involuntary closures are positively related to both family structure (in particular, single motherhood) and unemployment and negatively related to financial assets. However, involuntary closure is not related to poverty per se, but rather is more widespread. Second, behavioral traits or cognitive ability may affect individual budgeting ability. We find evidence of a higher incidence of closures by the young, the old, and by poorly educated households.

Using a sociological framework, we also consider how *community structure* might affect closure activity. We explore whether communities with greater social capital might have lower closure rates, whether due to lower rates of individual overdrafts, more lenient or flexible bank policies, or more financial support from friends and family. We find evidence that social capital, measured by voting turnout, is related to closure rates—a finding that holds even after controlling for differences in income, wealth, and other demographic and economic characteristics across counties.

Bank policies also play a role in involuntary closure rates. Banks set rules about which debit applicants to accept; design products that condone or even encourage overdrafts, at a cost; and choose when and whether to close accounts. For example, many banks offer to honor the debits of a customer with insufficient funds with the expectation that the customer will pay back the amount of the posted checks plus a fee (often $25–35).[4] These interactions can be thought of as high-cost, short-term credit because of the "effective interest rate" for the short-term extension of credit. For example, a $30 fee for a $100 overage remediated in 2 weeks would correspond to an APR of 780%, were it considered interest. Moreover, many banks also offer "free checking" programs with overdraft privileges but no monthly maintenance fees. Such programs may attract less financially stable customers. As these customers provide a significant source of revenue through overdraft fees, banks may have little incentive to promote consumer self-discipline.[5]

Involuntary account closure also reflects the *bank's* decision to close the account. Banks set policies—or permit branch discretion—to determine when to close accounts. For example, banks do not typically close accounts simply because the customer bounced a single check. Involuntary account closure implies that the bank found the customer's financial mismanagement to be so severe that it was no longer in the bank's interests to extend that person banking privileges.

These dynamics may affect closures in several ways. First, we posit that in more competitive banking markets, banks extend their pool of potential clients to include more risky customers. Second, we consider whether "local" banks—which know their customers better or have "soft" information on local markets (Agarwal and Hauswald, 2007)—are less likely to force closures than larger multi-market banks. As hypothesized, we find that bank competition and localness are related to closures. This line of inquiry is consistent with related research on bank credit decisions (Agarwal and Hauswald, 2007; DeGryse and Ongena, 2005; DeYoung et al., 2008; Hauswald and Marquez, 2006).

Finally, banking activity takes place in the context of a *broader financial service sector*. In particular, the short-term, high-cost unsecured loans made available by payday lending could forestall closures or could exacerbate them by enabling unmanageable debt levels. Using both our national data and data from a regulatory shift in Georgia, we find that the presence of payday lending is positively related to closures.

The remainder of the paper is divided into five sections. In Section 2, we describe our data and empirical methodology. Sections 3 and 4 examine the empirical determinants of closure activity. In Section 5, we discuss the implications of our work and additional research.

2. Data and methodology

To explain the determinants of involuntary bank account closures, we examine how differences in closure rates relate to empirical proxies for consumer behavior, community traits, bank policies, and financial sector traits both across and within US counties over time. Below, we describe these factors and our measure of closures. Tables 1 and 2 contain characteristics of our sample of counties along with variable descriptions, data sources, and summary statistics for all variables.

2.1. Involuntary closure activity

ChexSystems, the eFunds database, is our main source of information for account closures. eFunds is a subsidiary of Fidelity National Information Services. ChexSystems receives information on involuntary account closures from approximately 9000 financial institutions, or about 90% of US commercial banks, credit unions, and savings institutions. Involuntary closures are coded as caused by delinquent payments or by fraud. Financial institutions that provide client data to ChexSystems also use the system to view the banking history of new account applicants.

In the case of new checking accounts, ChexSystems compares applicant data with information from different sources in order to flag individuals with a recent negative, risk-increasing event. The system notifies the bank if the customer has been forced to close an account at another bank or has left bills unpaid at a participating retailer. It also informs the bank of potential inconsistencies between the given social security number and other identifying information, which might signal identity fraud or theft.

Table 1
Sample selection.

Number of counties in US	3141
Number of counties with reported closures	3138
Less: Counties in MA, NH, RI, and VT	43
Less: Counties with missing data for any variable	238
Number of counties in final sample	2857

[4] For a detailed description of an overdraft program, see Campbell et al. (2007).

[5] For example, in one case study of a small bank, 11% of debit customers overdrafted more than 50 times a year, with each overdraft incurring a fee of $25 (Campbell et al. 2007).