

A RESEARCH BRIEF FOR THE METROPOLITAN POLICY PROGRAM AT BROOKINGS

Banking on Wealth: America's New Retail Banking Infrastructure and Its Wealth-Building Potential

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Executive Summary

The \$100 billion size of the high-cost non-bank basic financial services industry, including check cashers, payday lenders, and pawnshops, points to the high demand for basic financial services among low- and moderate-income customers. Alternative products sold by banks could meet those consumer needs, while also creating an opportunity for households to convert their current spending on high-cost services into savings and even wealth. To explore that potential, this study conducts a comprehensive review of the location of all basic retail financial services firms to determine their accessibility to low- and moderate-income consumers. The study also generates new projections on the potential savings incurred by several scenarios of hypothetical unbanked workers if efforts were made to transfer their high-cost fees into savings or investment vehicles. The study finds:

- **Moderate- and lower-income households pay over \$8 billion in fees to non-bank check-cashing and short-term loan providers to meet their basic financial services needs.** Those fees are collected from 48,082 non-bank establishments, which include approximately 26,000 businesses that charge an estimated average of \$40 per payroll check to cash a check from typical unbanked households with full-time workers.
- **Over 90 percent of these non-bank basic financial service providers are located within one mile of a bank or credit union branch.** For instance, 93 percent of non-bank businesses that cash checks are located within one mile of a bank or credit union branch.
- **Despite popular perception, bank and credit union branches are more likely to be located in low-income and lower middle-income neighborhoods than non-bank financial services providers.** For instance, bank and credit union branches are located in 56 percent of lower-income neighborhoods; non-banks are in 31 percent of lower-income neighborhoods.
- **A full-time worker without a checking account could potentially save as much as \$40,000 during his career by relying on a lower-cost checking account instead of check-cashing services.** Depending on types of checking accounts, residence, money management skills, and account stability, this same unbanked worker, assisted in transferring his savings into a low-cost exchange-traded fund with a discount broker, could generate as much as \$360,000 in wealth over his 40-year career.

In sum, there is a substantial opportunity to leverage this wide distribution of banks and credit unions to connect moderate- and lower-income households to potentially lower-cost basic financial services. Public and private leaders can help moderate- and low-income households realize their full wealth-building potential by working with the vast retail infrastructure of banks and credit unions that are already well-positioned geographically to provide affordable financial services to these consumers. Further, by working together, the public and private sectors can address the numerous business and consumer dynamics that drive the supply of and demand for high-cost financial services, and perhaps most importantly, confront what has proved to be the very difficult task of promoting household savings and investment.

Public and private leaders can help moderate- and low-income households realize their full wealth-building potential by working with the vast retail infrastructure of banks and credit unions already well-positioned geographically to provide affordable financial services.

Introduction

Hundreds of dollars in annual savings could *potentially* be created for millions of moderate- and lower-income workers today by doing nothing more than shifting them from the high-cost basic financial services that they currently rely upon to lower-cost services. If workers were also helped to invest those savings in stocks or bonds, even more wealth could potentially be created over their careers.

The wealth-building potential among these households lies in the over \$100 billion market for high-cost basic financial services sold by non-bank businesses, services that are widely sold at lower prices by banks and credit unions.¹ There are over 48,000 non-bank establishments that retail these high-cost financial products, collecting about \$8.5 billion in fees from mostly low- and moderate-income consumers.² The business model of these high-cost firms is based on high yields and volume.³ Their success also relies on a lack of competition from banks and credit unions, which have enough capital diversification to retail comparable products at lower prices.⁴

The market calculus that has bred a lack of competition appears to be changing, however. Between 1989 and 2004, the proportion of households without checking accounts that form the base of the \$60 billion non-bank check-cashing market dropped by over 40 percent.⁵ Additionally, the moderate- and low-income households that comprise the bulk of demand in the \$43 billion high-cost short-term loan market were also the fastest growing segment of the revolving credit market during this period, the closest competitive product sold by banks.⁶ More recently, the FDIC has announced an ambitious initiative to encourage banks to pilot lower-cost alternatives to payday loans.⁷

Yet, as the \$8.5 billion in fees suggest, consumer demand remains high for high-cost basic financial services.⁸ Among the more prominent reasons often highlighted to explain this demand is lack of proximity to their competitors—bank and credit union branches. In particular, these firms are commonly perceived as successful because banks are thought to avoid neighborhoods where customers of these high-cost services live, opening a void for high-cost financial firms to fill.⁹

This paper assesses this commonly held belief, along with the wealth-building potential of connecting high-cost basic financial service customers to potentially lower-cost options. We begin with an overview of the over \$100 billion market for high-cost basic financial services that has helped drive these market changes. This includes a review of the business and consumer dynamics that drive the supply of and demand for high-priced products in this diverse market.

We then assess the location of banks, credit unions, and non-bank financial institutions by neighborhoods of all income types. This includes an assessment of where the 48,000 high-cost basic financial services establishments as well as the nearly 108,000 bank and credit union branches are located in this country.

These geographic data indicate that access to the infrastructure of bank and credit union branches is not segregated, but actually quite equitable across neighborhoods of different income levels, even while many neighborhoods of all income levels do not have a bank or credit union.¹⁰ We also find that nearly all of the high-cost basic financial service establishments are located very close to banks and credit unions, suggesting that there is at least the infrastructure in place for competition between these types of financial institutions.

Given that this infrastructure is both more accessible and clustered than commonly thought, there is a striking opportunity to build wealth for moderate- and lower-income consumers by connecting them to potentially more affordable alternatives available at banks and credit unions. To evaluate that wealth-building potential, we next run a series of simulations that evaluate financial outcomes over the lifetime of different types of households without checking accounts, with an emphasis on full-time workers, since a majority of these unbanked households include at least one adult who is employed full-time. We also consider different outcomes for a typical customer of payday loan businesses. The various outcomes that emerge are a result of different consumption and investment choices in the financial services marketplace.

We find that redirecting the fees from high-cost services to lower-cost alternatives sold by banks could generate vast sums of savings over time for a lower-income worker, depending on the type of checking accounts used by the worker, the state he lives in, his ability to manage money, and the frequency at which he cycles in and out of accounts. If he went further and put those savings into

investment vehicles, such as low-risk EE or I savings bonds, or higher-risk stock market investments, such as a low-cost, tax-efficient exchange-traded fund, this worker could see his savings grow into a substantial amount of wealth over the same period.

In response to this evidence, this paper argues that public leaders should strive to unleash the wealth potential of moderate- and low-income workers by working with banks and credit unions to help them sell and market competitively priced products appropriate for this demographic. At the same time, public and private leaders also need to help connect customers to the mainstream financial services that are in consumers' best financial interests. We find a wide degree of diversity in the entry checking accounts offered by banks (and we assume credit unions too), which affect the wealth-building potential of workers over time. We also find that it would take a sophisticated knowledge of the financial services market—less likely to be present among newly banked individuals—for workers to find optimal investment opportunities for potential savings.

Finally, and perhaps most importantly, realizing the *full* potential of this wealth-building opportunity for moderate- and low-income households will require public and private leaders to confront what has proved to be the very difficult task of promoting household savings, particularly among moderate- and low-income households.¹¹ This paper points to potential sources for savings among a share of these households by redirecting market demand from high-cost services to lower-cost alternatives. And those savings could be created without taking away a single dollar currently being spent on other family priorities.

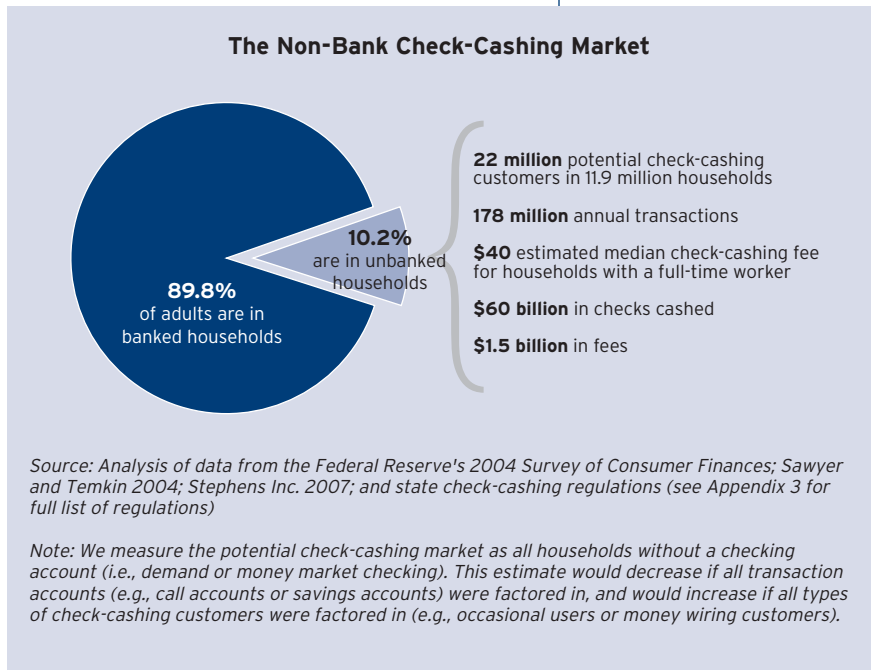
The High-Cost Basic Financial Services Market

The over \$100 billion that makes up the basic high-cost financial services market is generated from a diverse group of consumers and businesses that collectively form numerous submarkets, including those that focus on supplying check-cashing services and short-term loans.¹² Besides the common characteristic of comparatively high prices, there are also broadly similar business and consumer dynamics in each of these submarkets that drive the supply of and demand for high-cost basic financial services. This section will review these dynamics in two very broad consumer submarkets: the unbanked, who largely require high-cost services to cash paychecks, and the customers of high-cost short-term credit. Together, these consumer submarkets represent the vast majority of U.S. households that are served by high-cost basic financial service establishments today.

The Unbanked

What is the market size?

Overall, about 10 million households lack a transaction account (e.g., savings, checking, call account, money market) and about 12 million do not have a checking account (e.g., checking, checking money market), instead relying in large numbers on check-cashing establishments or other financial institutions that charge fees to cash paychecks.¹³ This latter group of unbanked households represents the primary market for the \$60 billion in checks cashed every year at non-bank establishments, adding up to \$1.5 billion in fees collected from at least 178 million different transactions.¹⁴ Among the households that lack a checking account, 52 percent include at least one full-time worker, costing the household an average of \$40 per payroll check to use a non-bank check casher.¹⁵



A Demographic Profile of Households Without Checking Accounts

Overall	
Proportion of households with a college-educated adult(s)	6.2%
Median income	\$17,000
Median age of household head	42
Proportion of households with a white head of household	37.6%
Proportion of households with a black head of household	31.6%
Proportion of households with a Hispanic head of household	28.5%
Proportion of households with a head of household of some other race	2.3%
Proportion of households with a full-time employed adult(s)	51.5%
Proportion of households with an adult(s) working at a small* company	61.1%
Proportion of households with a college-educated adult(s)	7.9%
Median income	\$24,000
Median age of household head	36
Proportion of households with a part-time employed adult(s)	13.6%
Proportion of households with an adult working at a small* company	74.1%
Proportion of households with a college-educated adult(s)	8.3%
Median income	\$12,000
Median age of household head	41
Proportion of households with no employed adult(s)	34.9%
Proportion of households with a college-educated adult(s)	3.0%
Median income	\$9,600
Median age of household head	58

Source: Analysis of data from the Federal Reserve's 2004 Survey of Consumer Finances

*Notes: Median age and race computed for household head. *Small companies are those with fewer than 100 employees.*

Who are the unbanked?

In general, the unbanked are a) workers that have b) low levels of educational attainment and c) moderate incomes, d) are middle-aged, and e) work for small companies.¹⁶ They do not obviously break down by either gender or racial categories, although Hispanic and black heads of households are much more likely than whites to lack an account. This profile is clear from the evidence in the Federal Reserve's Survey of Consumer Finances about households without checking accounts (nearly all of the unbanked households). About 60 percent of these unbanked households do not include at least one adult that has a high school diploma, and 94 percent do not include at least one adult with a college degree.¹⁷ On the other hand, over 65 percent of these unbanked households, or almost 8 million, include at least one worker. Nearly all of these workers reported when they were surveyed in 2004 that they had been constantly employed for at least the preceding 12 months, indicating that they not only work, but that they also have a steady job. Among households with a full-time worker, the average income is about \$27,000.

That most of these unbanked households have adults with steady jobs and a moderate income suggest that the bulk of them have the economic characteristics suitable for a checking account. We cannot observe their fraud behavior, but it does not seem unreasonable to conclude that a very large segment of the population is eligible, given the large decreases in the size of this unbanked population over time and the large share who have never had a checking account in the past, indicating a clean track record.¹⁸

Where are the non-bank check-cashing businesses located?

In total, our inventory of the retail basic financial service infrastructure in the United States indicates there are now 26,019 non-bank businesses that provide check-cashing services.¹⁹ These businesses are located in nearly one out of every four neighborhoods in this country.²⁰ While these businesses are most densely concentrated in low-income neighborhoods, they are also located in higher-income neighborhoods, but at lower rates. From wealthy areas of Beverly Hills to poor areas of the Bronx,

these businesses find demand for their services.²¹ In particular, nearly one-third of low-income neighborhoods (the bottom quartile) contain a non-bank check casher, compared to about one-quarter of both lower middle- and higher middle-income neighborhoods (the middle two quartiles), and just one-sixth of high-income neighborhoods (the top quartile). Nationally, there is about one check-cashing establishment for every 10,000 people in the country.

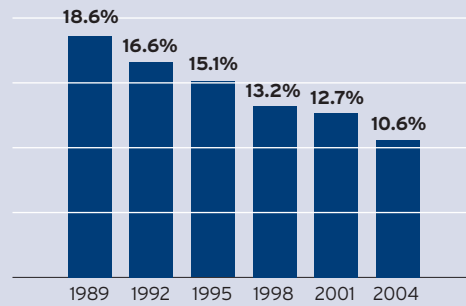
Why does the unbanked market exist?

If opening bank accounts were as simple as pointing out the potential lost wealth associated with not having an account, there would probably not be much of an unbanked population. The unfortunate reality is that a number of entrenched business and consumer dynamics interact to depress demand for accounts in spite of this information, making it entirely rational for both banks and some consumers to avoid one other. Business dynamics limit the supply of appropriate accounts, while consumer dynamics limit both the supply of and demand for accounts. None of these dynamics have proved to be insurmountable.

Business Dynamics

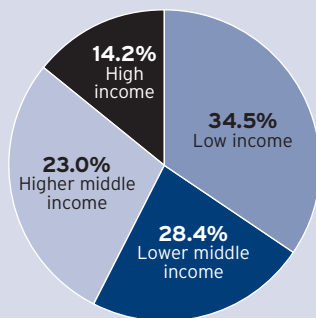
The Center for Financial Services Innovation has generated an extremely helpful catalog of publications that assess and address constraints cited by financial service firms' as factors delimiting their provision of checking accounts and other basic products to lower-income consumers.²² Among the numerous reasons cited by these institutions for not serving this market are concerns about a) low margins, b) fraud, and c) lack of best practices.²³ There are also concerns expressed outside of the financial services community that banks and credit unions either d) do not make appropriate products available to the unbanked and e) effectively dissuade potential customers by charging higher prices than those offered by high-cost financial service companies, such as overdraft fees.²⁴

Households Without Checking Accounts, 1989-2004

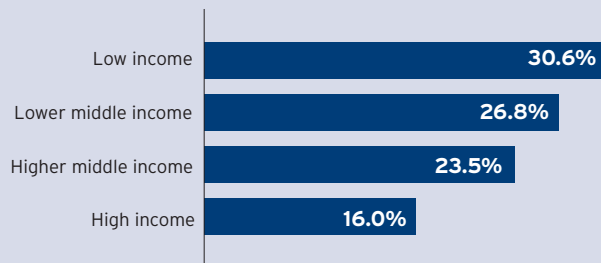


Source: Analysis of data from the Federal Reserve's Survey of Consumer Finances: 1989, 1992, 1995, 1998, 2001, and 2004

Distribution of Non-Bank Check Cashers Across Neighborhood Income



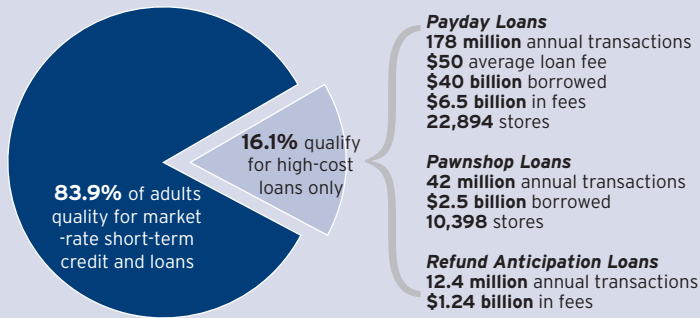
Proportion of Neighborhoods That Contain Non-Bank Check Cashers, by Median Income



Source: Analysis of data from the U.S. Census Bureau, infoUSA, and state licensing departments

Notes: Neighborhood income represented by census tract. Census tracts with populations smaller than 100 are not included in this analysis. Income groups were determined using national neighborhood income quartiles where median neighborhood income is greater than \$0 (low income is \$37,146 or less; lower middle income is between \$37,147 and \$48,258; higher middle income is between \$48,259 and \$64,190; and high income is \$64,191 or greater). Financial services data are current as of 2006; neighborhood income data are from 1999 and have been adjusted to 2006 dollars using the Bureau of Labor Statistics' CPI Research Series.

The High-Cost Short-Term Loan Market



Source: Analysis of data from FICO; Wu et al 2006; the Association of Progressive Rental Organizations; infoUSA; and state licensing departments

Note: This figure excludes some types of high-cost short-term loan products, such as loan sharks, auto title loans, and rent-to-own stores, for which reliable industry data are not available.

Because these concerns do not suggest that the majority of unbanked households cannot be banked, the business dynamics of this market have been shifting as competition for the unbanked market has intensified. Data from the Federal Reserve indicate, for instance, that the proportion of U.S. households without a checking account has dropped by over 40 percent between 1989 and 2004.²⁵ Public policies like the federal electronic transfer initiative very modestly helped propel that trend; much more important were widespread efforts by financial institutions to move into this market space and compete for deposits.²⁶

Consumer Dynamics

On the other side of the unbanked market are the households that choose to not use a bank account. The Federal Reserve's 2004 Survey of Consumer Finances points to a number of reasons

why these households eschew banks and credit unions. Within the group without a checking account, the two most prevalent arguments for avoiding a bank are that households feel like they do not write enough checks to require a checking account (28 percent) and that they do not like dealing with banks (23 percent). Another 14 percent suggest they do not have enough money, and 12 percent indicate that they think the fees are too high. All of the other potential reasons for avoiding a bank, like poor credit, past problems managing an account, or not living near a branch, are cited by only a small minority of households as their most important reason for not having an account.²⁷

This evidence points to the fact that a significant share of households without checking accounts are unbanked for reasons that can be addressed by financial institutions, which is one important reason why this market is shrinking in size amid changing consumer dynamics. To respond to the segment of households that feel like they don't write enough checks for a checking account, for instance, money market mutual funds were created in the 1970s.²⁸ Similarly, the 23 percent of the market that do not trust banks can be helped through affinity partnerships and other community-based trust-building tools.²⁹ And the 14 percent that think they do not have enough money to use an account can be connected to lower-cost alternatives, like prepaid cards.³⁰ Because of these options, the proportion of U.S. households that do not use a checking account is falling, although there are still large shares that lack an account.

The Customers of High-Cost Short-Term Retail Loans

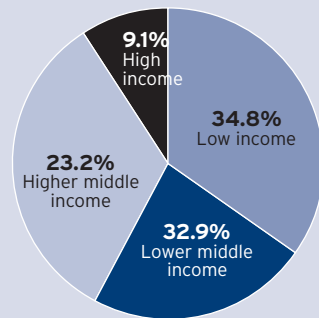
What is the market size?

In total, U.S. households purchased more than \$40 billion in high-cost short-term loans at retail locations last year.³¹ Although there is no reliable estimate of the total number of adults that bought these high-cost loans, industry reports suggest that as many as 34 million adults could potentially demand the services of these companies.³² The high-cost short-term loan market consists of several types of high-cost lenders, but two comprise the dominant portion: payday lenders and pawnshops.

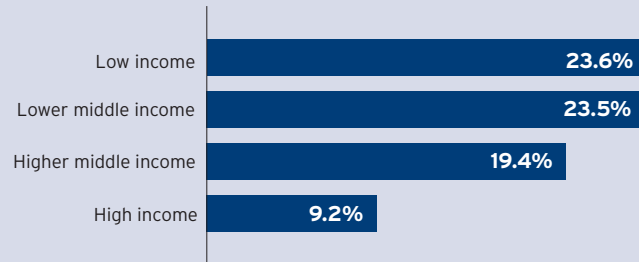
Payday loans are short-term cash loans made to workers in advance of their paycheck, and are sold at rates as high as 25 to 30 times the average rate charged by credit cards, the closest alternative widely sold by banks.³³ An expensive business model drives up the costs of these loans; recent analyses suggest that large margins in the industry may also buoy these prices.³⁴

The average fee for these loans is about \$50, and most recent data suggest that U.S. households now spend about \$6.5 billion every year in fees for about \$40 billion in payday loans purchased at one of the more than 22,894 establishments now in business.³⁵ There is also evidence that indicates that a typical payday loan customer can pay more than twice the value of their loan in fees, suggesting that

Distribution of Payday Lenders Across Neighborhood Income



Proportion of Neighborhoods That Contain Payday Lenders, by Median Income



Source: Analysis of data from the U.S. Census Bureau, infoUSA, and state licensing departments

Notes: Neighborhood income represented by census tract. Census tracts with populations smaller than 100 are not included in this analysis. Income groups were determined using national neighborhood income quartiles where median neighborhood income is greater than \$0 (low income is \$37,146 or less; lower middle income is between \$37,147 and \$48,258; higher middle income is between \$48,259 and \$64,190; and high income is \$64,191 or greater). Financial services data are current as of 2006; neighborhood income data are from 1999 and have been adjusted to 2006 dollars using the Bureau of Labor Statistics' CPI Research Series.

the per-transaction fee of \$50 may understate the true cost of this product.³⁶

Less data are available on pawnshop loans; but that data indicate that there are approximately 10,300 in business, issuing \$2.5 billion in loans annually.

Who are the customers of high-cost loans?

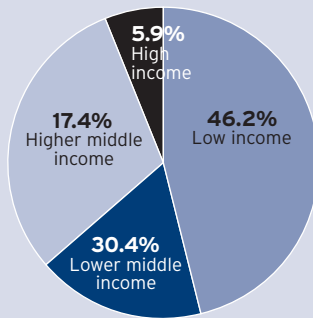
There is currently a limited amount of information available that profiles the characteristics of high-cost short-term loans customers.³⁷ From the data that are available, the majority of payday loan customers were found to earn a moderate income between \$25,000 and \$50,000 and be under 44 years of age. Pawnshop customers tend to be in the same age grouping, but earn an income below \$25,000.³⁸ But because the Federal Reserve's Survey of Consumer Finances does not profile the characteristics of these customers and no other routinized survey is available, there is less than ideal information about the size of this customer cohort and its demographic profile.

Where are these payday lenders and pawnshops located?

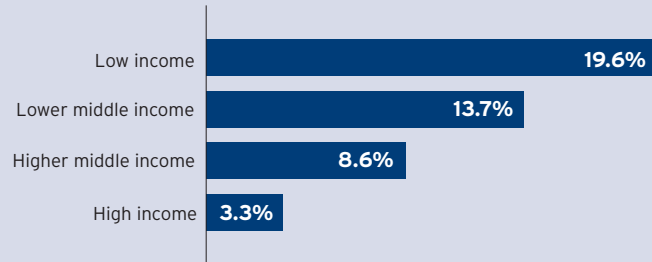
According to our inventory of the basic retail financial service infrastructure in the United States, about one out of every five neighborhoods now includes at least one payday loan business.³⁹ These businesses tend to be more heavily concentrated in moderate- and lower-income neighborhoods, but even wealthy areas of the country, like Fairfax County in Virginia, have payday loans for sale. In particular, about a quarter of both low-income and lower middle-income neighborhoods have at least one payday lending business. That compares to about one-fifth of higher middle-income neighborhoods and just one-tenth of high-income neighborhoods.

Pawnshops, on the other hand, tend to be much more concentrated in low-income neighborhoods. These are businesses that sell high-cost short-term loans secured by property, at rates that range from 2 to 25 times that of the average credit card.⁴⁰ That these businesses rely on retail distributional channels also suggests that an expensive business model is likely a primary reason why these loans come with such hefty relative fees. Industry estimates are that this is a \$2.5 billion annual market, but no information is available to suggest what share of this goes toward fees. According to our inventory of basic financial service locations, there are more than 10,300 pawnshops now in business. Of these locations, more than 46 percent are in low-income neighborhoods and another 30 percent are in lower middle-income neighborhoods, pointing to their mostly moderate-and lower-income customer base.

Distribution of Pawnshops Across Neighborhood Income



Proportion of Neighborhoods That Contain Pawnshops, by Median Income



Source: Analysis of data from the U.S. Census Bureau, infoUSA, and state licensing departments

Notes: Neighborhood income represented by census tract. Census tracts with populations smaller than 100 are not included in this analysis. Income groups were determined using national neighborhood income quartiles where median neighborhood income is greater than \$0 (low income is \$37,146 or less; lower middle income is between \$37,147 and \$48,258; higher middle income is between \$48,259 and \$64,190; and high income is \$64,191 or greater). Financial services data are current as of 2006; neighborhood income data are from 1999 and have been adjusted to 2006 dollars using the Bureau of Labor Statistics' CPI Research Series.

Why does the high-cost short-term loan market exist?

As with the unbanked market, there are a number of entrenched market dynamics that drive up demand for high-cost short-term loans, so this market cannot be captured by merely pointing to lost wealth-building potential or lost revenue for banks and credit unions. Market dynamics at work on both the business and consumer sides propel the supply and demand for products, despite the wealth that households can forfeit by participating in this market.

Business Dynamics

There are two important groups of businesses that relate to the high-cost short-term loan market: those financial institutions that avoid the market and those that participate in it. Businesses that avoid the market delimit the potential competition in this market, which may contribute to the high prices. On the other side, businesses that are in this market often face competition that does not produce price decreases.⁴¹ Business motivations differ between these two groups.

For businesses that avoid at least segments of this market, the Center for Financial Services Innovation information cited earlier is also relevant. In particular, financial institutions worry about a) low margins, b) fraud, and c) lack of best practices.⁴² There are also similar concerns expressed by groups outside of the financial sector, including that banks and credit unions d) do not have appropriate products available for customers of high-cost credit or e) effectively dissuade potential customers by charging higher prices than those offered by businesses that serve this market.⁴³

Businesses that do participate in the high-cost credit market tend to have f) expensive business models and g) large profit margins.⁴⁴ Whereas banks and credit unions rely on numerous capital sources, payday lenders and pawnshops must instead generate profit from just a handful of low dollar-value products, putting a premium on high volume and yields. Yet recent evidence of high margins in the high-cost short-term loan market suggests that prices may be inflated. The investment firm Stephens Inc., for instance, recently found that the top businesses in the basic financial service component of this market have very high profit margins.⁴⁵

Because these market dynamics collectively create an opportunity for banks and credit unions to sell lower-priced alternatives, the market has become increasingly competitive in recent years, although not in all submarkets. Among the signs of this are a) over 1,000 of the nation's estimated 10,500 credit unions are reported to now offer a payday loan alternative and b) the FDIC has attracted major, regional, and local banks to a pilot initiative to market a lower-cost payday loan alternative.⁴⁶ Despite these trends, market demand for high-cost short-term loans remains high.

Consumer Dynamics

Rigorous evidence regarding the dynamics that drive demand for high-cost short-term loans every year is thin.⁴⁷ From the reliable evidence that is available, we can conclude that these households a) tend to have limited or negative experience with credit, b) face imbalances between costs of living and income, and c) are broadly uninformed about existing lower-cost alternatives. For instance, the market size is defined by industry organizations as all individuals with credit scores below 600, indicating a general higher propensity to fall behind on payments and file for bankruptcy compared to the average household. Customers of high-cost credit also tend to have moderate or lower incomes, pointing perhaps to a greater relative need to cover mismatches between costs of living and household incomes.⁴⁹ We also know that these households tend to do less shopping around for credit and loans than higher-income households, which may make them less informed about lower-cost alternatives.⁵⁰ Such dynamics lead these households to purchase high-cost credit that they might be better off avoiding, and for which more affordable alternatives may be available.

The New Geography of the Financial Services Infrastructure

That there is an over \$100 billion market—collecting over \$8 billion in fees—for high-cost basic financial services sold over non-bank retail counters has contributed to an increase in competition in both of the major segments in this market. In the unbanked component, market trends indicate that banks and credit unions are increasingly competing with check cashers for market share, and winning that competition. In the high-cost basic credit market, banks and credit unions are also entering at an increasing clip. Because banks and credit unions are able to capitalize their businesses from a number of different sources and have sunk capital costs, they are ideally situated to continue to gain market share from non-depository institutions in this market by underpricing their competition, as long as they can continue to refine their tolerance for risk and nimbleness to adapt to new markets.

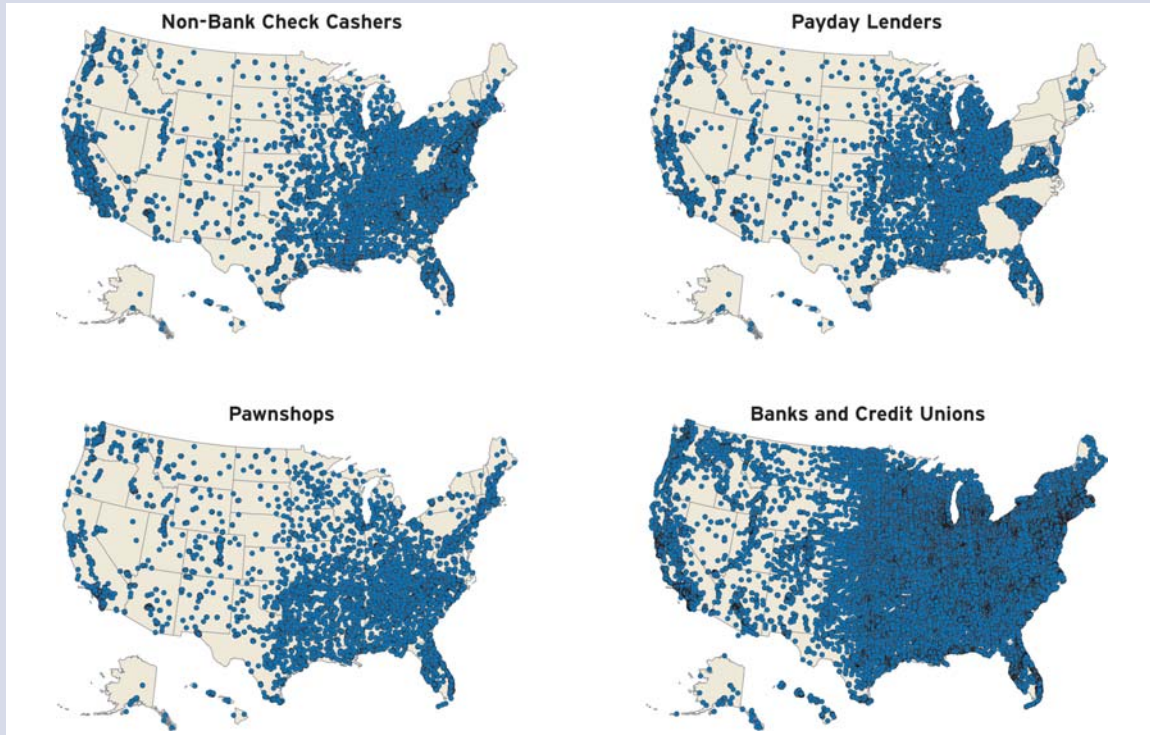
Among the more prominent reasons why it is thought so much demand still exists for these high-cost basic financial services is their proximity to their competitors—bank and credit union branches. In particular, these firms are commonly perceived as successful because banks are thought to avoid neighborhoods where customers of high-cost services live, opening a void for high-cost financial firms to fill.

In this section, we review our inventory of the 156,000 establishments that comprise the basic financial services market, which we define as all institutions that provide check cashing or short-term loans over a retail counter, and the location of those establishments in different neighborhood income categories.⁵¹ This includes depository institutions, like banks and credit unions, and non-depository, non-bank institutions, like check-cashing, payday lending, and pawnshop businesses. We do not include automatic teller machines because we're specifically interested in establishments where sales staff are and could potentially be pitted against each other in a competition for market share in the basic financial services market. This is important since so many customers in the high-cost basic financial services market indicate that they have negative impressions of, or are confused by, banks—viewpoints difficult for a machine to overcome.

Most retailers of basic high-cost financial services are located in neighborhoods with bank and credit union branches.

About 90 percent of high-cost basic financial service providers are located within one mile of a bank or credit union branch. Moreover, 78 percent of these providers do business in the same neighborhood or census tract as a bank or credit union. This is true of businesses that sell both check-cashing services and short-term loan products. While these businesses may not always be on the same block, they are almost universally located near enough to each other to directly compete for customers of retail financial services. Among the 26,019 standalone check-cashing establishments that serve the unbanked segment, 93 percent are located within one mile of a bank or credit union branch, and 72 percent are located in the same neighborhood as a bank or credit union branch. That most check-cashing establishments locate very near bank and credit union branches suggests that they would be vulnerable to competition should banks continue to move into the unbanked market with appropriate products. Very few are in areas of the country where there are no banks or credit unions nearby.

Spatial Distribution of Basic Financial Services



Source: Analysis of data from the Federal Deposit Insurance Corporation, infoUSA, the U.S. Census Bureau, and state licensing departments

Note: Data are current as of 2006.

Bank and credit union branches are more likely to be located in low-income and lower middle-income neighborhoods than non-bank financial service providers.

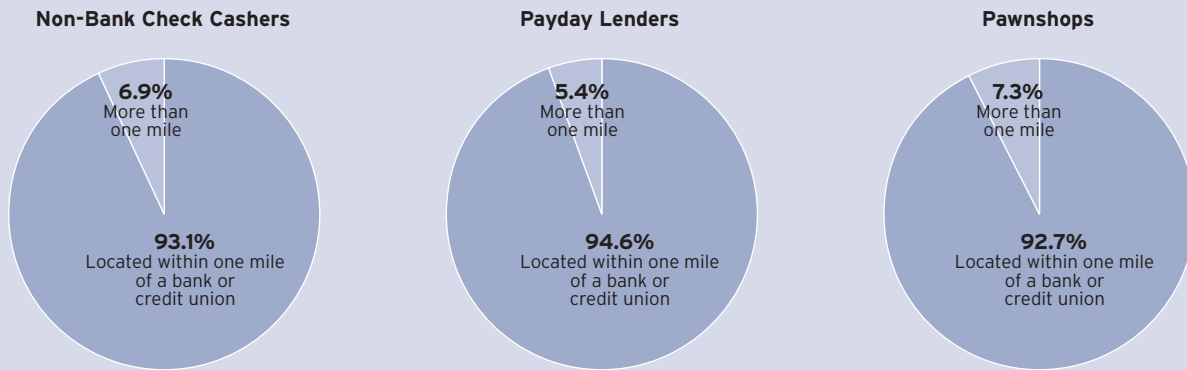
At the same time, banks have more exposure in lower-income markets than check cashers. Whereas check cashers are in 31 percent of the low-income neighborhoods in this country, banks and credit unions are located in 56 percent of the low-income neighborhoods. That's consistent with the fact that 77 percent of those households with an income less than \$30,000 have a checking account, pointing to the large market share banks already have in this lower-income part of the market.

Payday lenders and pawnshops are also located near banks and credit unions. Of the 22,894 payday lenders now in business, about 95 percent are located within one mile of a bank or credit union branch, and 84 percent are located in the same neighborhood or census tract as a bank or credit union branch. This trend is consistent across neighborhoods of all income levels. In low-income neighborhoods, for instance, there are approximately 7,977 payday lending establishments currently in business. Of those, 83 percent are located in the same neighborhood as a bank or credit union and 96 percent are located within one mile of a bank or credit union branch. No matter how these data are organized, the bottom line is that almost all payday lenders seem to be clustered around bank and credit union branches. Very few of these businesses are located in areas that are remote from mainstream financial services. This is consistent with the fact that payday lender customers require a bank or credit union account to utilize their services.

Pawnshops also tend to be located near bank and credit union branches. Of the 10,398 pawnshops that are currently in business, about 93 percent are located within one mile of a bank or credit union branch, and 80 percent are located in the same neighborhood as a bank or credit union branch. That trend is only modestly different across neighborhood income groups, indicating that pawnshops are as likely to be close to branches in low-income neighborhoods as they are in higher-income neighborhoods.

By nearly any measure, these data indicate that nearly the entire high-cost basic financial services infrastructure is located close by to bank and credit union branches.

Proximity of Non-Bank Basic Financial Services to Banks and Credit Unions



Source: Analysis of data from infoUSA, the U.S. Census Bureau, and state licensing departments

Note: Data are current as of 2006.

Low-income neighborhoods have about as much access to bank and credit union branches as middle- and higher-income neighborhoods

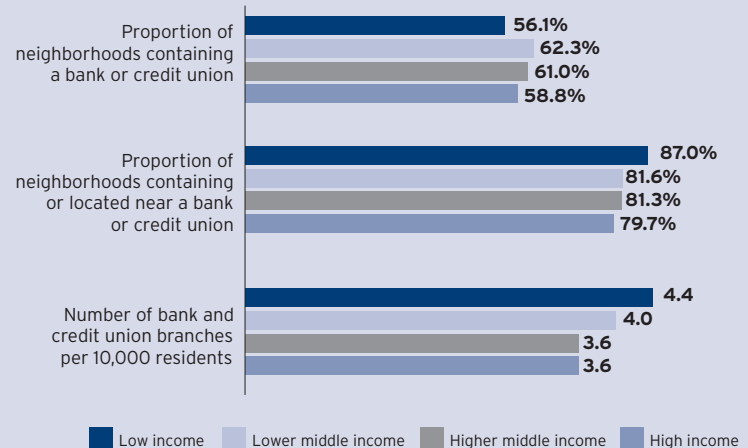
Consistent with longstanding findings, we find that banks and credit union branches tend to be fairly evenly spread out across different neighborhood income categories. By nearly any measure, banks and credit unions—particularly banks—have a substantial infrastructure in place to serve moderate- and lower-income consumers.

In particular, about 24 percent of the 107,941 bank and credit union branch locations are located in low-income neighborhoods, 26 percent in lower middle-income neighborhoods, 25 percent in higher-middle-income neighborhoods, and 26 percent in high-income neighborhoods. According to these data, banks and credit unions have fairly evenly spread out their branch locations across neighborhoods of different income levels.

As a result, there is equitable access to bank and credit union branches across different neighborhood income categories. In particular, 56 percent of low-income neighborhoods and between 59 and 62 percent of higher-income neighborhoods contain a bank or credit union branch. In both cases, there is only a very modest difference between the access to branches in lower-income neighborhoods and in all others.

But even this very modest bias toward higher-income neighborhoods in the distribution of banks and credit unions disappears once population in those neighborhoods is controlled for. According to this analysis, there are actually more banks and credit unions per-capita in lower-income neighborhoods than in higher-income neighborhoods. In particular, there are 4.4 branches for every 10,000 people living in low-income neighborhoods, compared to between 3.6-4.0 branches in higher-income neighborhoods. Similarly, when a more rigorous measure of proximity is employed, there is actually more access in lower-income neighborhoods than in higher-income neighborhoods.⁵² In particular, 87 percent of lower-income

Access to Bank and Credit Union Branches by Neighborhood Income



Source: Analysis of data from the Federal Deposit Insurance Corporation, infoUSA, and the U.S. Census Bureau

Note: Financial services data are current as of 2006; income and population data are from 1999.

neighborhoods either contain or are located near a branch. That compares to about 82 percent of lower middle- and higher middle-income neighborhoods, and about 80 percent of high-income neighborhoods.

Importantly, past research has indicated that this even distribution of mainstream financial service locations is not a constant trend across metropolitan areas, and these data confirm the findings in this earlier work.⁵³ Cities like New York, Los Angeles, and Baltimore, for instance, are exceptions to some of these nationwide trends, while cities like San Francisco and Seattle tend to reflect the trends. Yet, viewed at the national level, it becomes clear that there is now a fairly equitable distribution of access to bank and credit union branches across different neighborhood income categories.

The Wealth-Building Potential of Lower-Cost Financial Services

Because of the evidence that most moderate- and lower-income neighborhoods have access to a bank or credit union branch, there is an opportunity to help moderate- and lower-income households build wealth by connecting them to lower-cost financial services, where such lower-cost services exist. For instance, the fee-less check cashing service provided by banks to account holders indicates that the \$1.5 billion currently being paid to cash checks represents a potentially large opportunity to build wealth for moderate- and lower-income customers. That opportunity may be mitigated by other fees that banks charge customers, like overdraft fees, but we show in this section that it would take an enormous number of overdrafts, along with a high overdraft fee, to erode this wealth-building potential.

To illustrate this wealth-building potential, this section simulates different financial outcomes for moderate- and lower-income households that vary depending on their financial choices, the products that are made available to them, their duration in and outside of banks, and the stability of their jobs. *In each case, we focus only on the savings and investment potential from lower-cost financial services, conservatively assuming that no additional savings will be available for any worker.* We are also interested in only those households without a checking account that could potentially hold an account, since non-bank check-cashing businesses do currently provide a very important service for those individuals who cannot use a checking account for any number of reasons.⁵⁴ Because the share of households without checking accounts has dropped in recent years, and about half of these unbanked households include a full-time worker, we assume that a majority of the current population could qualify for an account if the business and consumer dynamics outlined above are addressed.

We show that, under most circumstances, there is a substantial opportunity to use savings created by lower-cost financial services already in the marketplace to build a vast amount of wealth for moderate- and lower-income consumers. But it is important to keep in mind that these are simulations based on what we know of the typical profile of different types of high-cost basic financial services customers. There will be important exceptions on either side of this central tendency, and these do vary systematically across states because of differences among the state laws that govern the high-cost basic financial services market.⁵⁵

Savings and wealth-building potential will also vary depending on the type of checking accounts that are selected, the household's ability to manage bank accounts and investments, and the duration spent cycling in and out of accounts during a working career. It is also important to keep in mind that there is a negative savings rate in this country, and that lower-income households face a number of obstacles to saving even with financial incentives, suggesting that much remains to be done before these potential wealth-building opportunities can be widely utilized.⁵⁶ We are highly skeptical, for instance, that former high-cost financial service customers today utilize our most ambitious wealth-building scenario, in which savings from lower-cost financial services are regularly invested in a low-fee exchange-traded fund through a discount broker. Among the numerous constraints, there is evidence that to the extent that savings can occur in low-income markets, there is more demand for short-term "emergency" savings than long-term savings and investments.⁵⁷

“There is a substantial opportunity to use savings created by lower-cost financial services already in the marketplace to build a vast amount of wealth for moderate- and lower-income consumers.”

Nonetheless, it is instructive to consider the *potential* for savings and wealth-building investments that could be generated by connecting these customers to lower-cost financial service alternatives that are currently in the marketplace. Tens of millions of other Americans realize this potential and no reason exists to think that with the right set of institutions, products, and market dynamics this potential could not also be realized by the moderate- and lower-income demographic that make up the bulk of this market.

Finally, we need to point out that each of these simulations looks at cumulative wealth potential over a worker's career, which means that any savings or investment gains are discounted with any fees incurred during periods where non-banks are used instead of banks. For instance, a worker who spends five years using a non-bank will need about four years using a bank and making investments with the savings before they show a positive wealth projection. This emphasis on cumulative wealth-building potential allows us to consider the full potential of different spending and savings decisions made on a yearly basis over the lifetime of a worker. A worker making a post-tax average annual income of \$20,000 will make about \$800,000 over the course of a 40-year career; our interest is in considering the full wealth-building potential of that money given different choices of basic financial services.

The potential wealth from check-cashing fees

To consider the potential savings and investment wealth that the \$1.5 billion now being spent at non-bank check cashers could build if it were instead put into savings or investments, we simulate a number of different possible demand and supply dynamics.⁵⁸ We consider the average income of households without a checking account that include at least one full-time worker, those with only a part-time worker, and unemployed households.⁵⁹ We are particularly interested in unbanked households with full-time workers, since a majority of households without a checking account include at least one full-time worker and this segment strikes us as a relatively attractive segment in the unbanked cohort for checking accounts.

In each case, we rely on our index of state check-cashing regulations to arrive at a 50-state average for government, payroll, and personal checks.⁶⁰ The rate that we use depends on the employment status of the worker. For instance, whereas we assume full-time workers are charged the 50-state average maximum payroll rate of 4.54 percent, we assume that unemployed workers are charged the 50-state average maximum government check-cashing rate, 3.24 percent.

We were also interested in looking at the effects of someone with access to different types of checking accounts. To guide this selection, we relied on a collection of all checking accounts currently on the market in New York, which the New York State Department of Banking makes available.⁶¹ Out of this list, we first consider what we refer to as an "optimal checking account" for a low-income worker requiring no minimum balance and no maintenance fees, but offering no interest on deposits and charging a relatively expensive overdraft fee (\$30 per incidence).⁶²

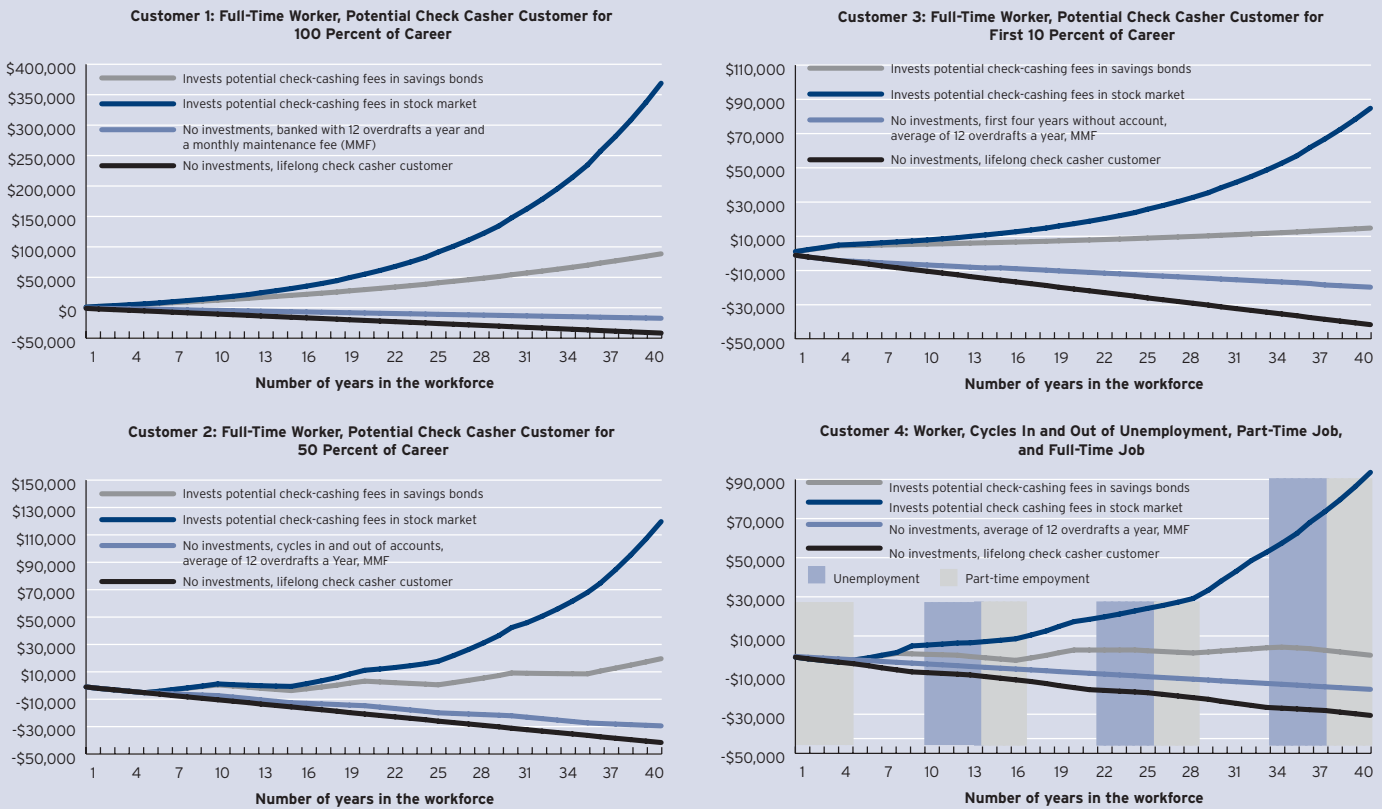
The second account we consider is sub-optimal because it includes a maintenance fee and a balance requirement. Among all of the accounts that fit this profile, we found that the average monthly maintenance fee was \$6 and the minimum balance requirement was about \$50. We also assume that some households fall in and out of being able to qualify for any of these checking accounts, and control for this possibility accordingly.

Customer 1: Full-Time Worker, Check Casher Customer for 100 Percent of Career

Our first scenario looks at the wealth-building potential of a full-time worker that has the potential to spend his entire working career cashing checks at a non-bank establishment. Our basis for this analysis is that over 60 percent of households without a checking account with a head of household over 64 have never had an account. Over half of the households with full-time workers have also never had a checking account.⁶³

For the purposes of this example, we assume that over his lifetime, this worker goes through spells of being promoted to a higher income and demoted to a lower income, producing a lifetime median approximately equal to the value of his current annual income, which we set at the current average income of households with a full-time worker without a checking account. We assume that this individual could potentially eschew banks for the duration of his career for any of the reasons cited earlier in the assessment of the consumer dynamics in this market. We also assume that this fee varies over

Cumulative Wealth Potential from Check-Cashing Fees (in 2007 Dollars)



Notes: All figures illustrate cumulative wealth and spending. All amounts are pre-tax (e.g., capital gains) and pre-inflation; both will erode the purchasing power of wealth generated. Investments are made exclusively with potential check-cashing fees; account, ETF, and broker fees are factored into estimates; dividends are not reinvested. We also assume an additional annual management fee potentially charged by a financial services firm or intermediary for facilitating a direct market investment. The annual amount spent on check-cashing fees by a full-time worker was calculated using the median after-tax income of unbanked households with one or more full-time workers (\$22,950) and the average maximum allowed check-cashing rate across all 50 states and the District of Columbia (4.54 percent). For specific descriptions of the stock market investment, savings bond, checking account, and non-bank information used in these simulations, see text. ¹Based on the average income of an unbanked full-time worker and the median payroll check-cashing fee. ²Customer 2 cycles in and out of banks every five years. ³Customer 3 obtains a bank account after four years in the workforce. ⁴Customer 4 invests only during periods of full-time employment. Amounts are based on the average after-tax incomes of: a) households with a full-time worker (\$22,950), b) households with a part-time worker (\$18,470), and c) unemployed households (\$12,042). The amount potentially spent by Customer 4 on check-cashing fees is variable. We apply the 50 state average payroll check-cashing fee (4.54 percent) during periods of full- and part-time employment, and the 50 state average government check-cashing fee (3.24 percent) during periods of unemployment.

time, but that it is the average fee paid throughout the work horizon.

In this case, over the course of a 40-year career, this worker will have spent about \$41,600 in check-cashing fees, collected from small payments to a check-cashing service every two weeks. If he had instead used a sub-optimal bank account, but struggled by overdrawing the account an average of 12 times every year, he would have spent about \$17,000 over the course of his career.⁶⁴ In this case, charges for regular overdrafts, and a monthly maintenance fee, would be less than the costs of the average rate charged by check-cashing establishments to cash payroll checks.

Moving to the ideal scenarios, we consider the wealth-building potential if this customer had instead used an optimal checking account for a low-income worker and put the resulting savings toward one of two investments. The first is a Treasury Direct account that allows individuals to invest in increments of \$25 at a time in EE Treasury Savings Bonds and currently pays a 3.4 percent rate of interest.⁶⁵ Although this may be a sub-optimal investment relative to stock market investments that are currently accessible to low-income workers, it entails a relatively less information-intensive process and carries a guaranteed rate of return, which may make it more attractive to risk-averse lower-income consumers. Assuming that the same check-cashing fee is instead invested in increments of \$25 over a 40-year period, and that the rate of return averages out over this period at the current rate level, this

worker could expect to generate nearly \$90,000 in pre-tax, pre-inflation wealth during his career by shifting savings from using a bank instead of a check casher into this savings bond alternative.⁶⁶

Finally, we consider a scenario that optimizes the wealth-generating potential of money spent on check-cashing fees, but it requires much more expertise. In particular, we surveyed the range of discount brokers to find the optimal broker for a low-income worker that makes infrequent stock investments. The broker account we identified requires no minimum balance, charges only \$4 per trade, and charges no maintenance fee. We then identified the entry price of an exchange-traded fund (ETF) that is designed to track the yield performance of the Dow Jones Industrial Average.

We selected an ETF because these investment vehicles are diversified, allow for a single share to be purchased at a time, have very low maintenance costs compared to mutual funds (0.1-0.65 percent), and are tax-efficient.⁶⁷ Because it would likely take some effort to help connect and maintain newly banked individuals to this opportunity, we assume that in addition to this ETF's low fee, a modest percent of the portfolio is subtracted every year to subsidize a financial intermediary to promote and help manage access to this investment vehicle.⁶⁸ Finally, we calculated the number of times every year that this full-time worker who relies on check-cashing businesses would be able to purchase a single share of this fund, based on the entry costs.

Our results indicate that this individual would be able to build about \$360,000 in pre-tax, pre-inflation wealth from the \$41,600 that he would have spent on check-cashing fees during his 40 years in the workforce, or almost 14 times his annual income. Just slicing this one modest fee out of their budget would be enough to build a substantial amount of wealth during his working career.⁶⁹ This would be enough to pay for about 25 years of retirement, not accounting for the value of social security benefits.

Customer 2: Full-Time Worker, Check Casher Customer for 50 Percent of Career

Our next scenario looks at the wealth-building potential of a full-time worker who spends about half of her working career cashing checks at a non-bank establishment and the other half in a checking account. Our basis for this analysis is that about half of households without a checking account indicate that they had an account at some point in the past.⁷⁰ Unfortunately, we currently lack rigorous information about the duration of that former banked status, the extent and timing of cycling in and out of banked status, the population of unbanked households that cycle in or fall out of accounts, and the causes of this behavior over time. For these reasons, we assume for illustrative purposes that this worker cycles in and out of accounts every five years. All of the other assumptions are the same as those made for Customer 1.

Over the course of this worker's 40-year career, she is projected to spend about \$29,000 on a combination of check-cashing fees and overdraft fees. We assume that if she is not optimizing the savings created when she switches to a lower-cost bank account, she is more likely to have trouble managing money than an investor. For that reason, we assign an average of 12 overdrafts for every year that she is not using a non-bank check casher, relying instead on an expensive checking account. In this scenario, this worker would still come out ahead over the course of her career by relying on banks. But, if in addition to the constant problems with overdrafts, this worker consistently also has trouble managing her minimum balance, she may be worse off in the long run by relying on this particular bank account.

Next, we consider the ideal scenario where this worker uses the savings that result from lower-cost financial services for investments, either by her own accord, a bank initiative, or some form of public-private partnership that can promote this opportunity. Note that this would likely require some form of facilitating institution or financial vehicle, since a worker cycling in and out of a bank account throughout her career would likely have trouble making (and keeping) investments. Nonetheless, because these investments are generated from modest savings created exclusively from lower-cost financial services, there is at least a possibility an account could be structured for this worker.

In this case, we find that this worker would be able to generate nearly \$20,000 over the course of her career by investing would-be check-cashing fees in bonds, assuming again that the only potential income for investment during her career is the money saved from lower-cost financial services. This amount is less than what Customer 1 generated because we assume that half of this worker's career is spent relying on check cashers, eroding her ability to use savings for investments. Importantly, the

cumulative amount she pays for these services is cushioned over time by the growth in the value of the bonds, but it still erodes the overall wealth-building potential.

In contrast, nearly \$119,000 would have been generated for this worker if she had instead used the savings to invest in the exchange-traded fund described above. Much of this wealth is generated from the fact that these periodic investments are left untouched during periods when the worker is using a non-bank check-cashing establishment instead. We assume that whatever dynamic was in place that forced this individual to lose her account also would make it fairly tempting to withdraw these savings and investments. Nonetheless, this simulation helps to illustrate how small amounts of investments made early in a worker's career can help cushion financial difficulties later on. Starter accounts for young workers with a wealth-building device such as this could be an attractive tool to address long-term wealth-building constraints.

Customer 3: Full-Time Worker, Check Casher Customer for First 10 Percent of Career

Our next scenario looks at the wealth-building potential of a full-time worker that has the potential to spend only his first four years in the workforce as a customer at a non-bank check-cashing establishment. Our basis for this scenario is that 34 percent of households without a checking account are headed by an adult between the ages of 18 and 34, including 42 percent of households with a full-time worker.

This worker would pay about \$19,000 for a combination of check-cashing fees and overdraft protection over the course of his career. But, because he switched to a checking account so early in his career, it would take an average of more than 30 overdrafts a year for this option to be worse than relying on a check-cashing establishment. An account would become more expensive more quickly if he also had trouble managing his minimum balance or had accrued other fees in addition to the monthly maintenance and overdraft charges.

Next, we consider the potential of those check-cashing fees paid during the first four years of this worker's career to grow over time into wealth. If he had invested in the safe bonds option, he could have generated about \$15,000 in wealth over his 40-year career. If the savings generated from lower-cost financial services were instead invested in the exchange-traded fund described above, this worker would have generated nearly \$85,000 in wealth during this same time period, just from the savings created from those first four years of his career by using an optimal bank account instead of a check-cashing establishment.

Customer 4: Worker, Cycles In and Out of Unemployment, Part-time Jobs, and Full-time Employment

Finally, we consider a scenario where a worker cycles in and out of being unemployed, having a part-time job, and having a full-time job. For the purposes of this scenario, we assume that this worker is only economically able to rely on a checking account when she has a full-time job, thus making her able to generate potential savings only when she is working full-time. Any other savings created during spells of unemployment or part-time work are assumed to be used for costs of living. Our basis for this analysis is that we do not know how many of the approximately half of unbanked households with a full-time worker have a full-time worker in their households over time. It strikes us as realistic to assume at least some of these households go through employment cycles, so we consider their circumstances accordingly.⁷¹

In this scenario, this worker would spend between \$17,000 and \$30,000 on basic check-cashing services, depending on whether she relied on a sub-optimal checking account and numerous overdrafts or a non-bank check-cashing business. If she was able to more effectively manage her bank account, she would spend less; if she had more difficulty, she would spend more. Depending on her behavioral pattern, the cost of having a bank account compared to relying on an alternative will vary.

If we assume she was able to invest savings from a lower-cost checking account in the 11 years during her 40-year career that she held a full-time job, this worker would be able to generate a cumulative amount of only about \$154 from relying on savings bonds. The bonds purchased during this period would be value around \$28,000, but her reliance on check-cashing fees for most of her working career would erode the cumulative wealth-building potential of her paychecks. On the other hand, she would have been able to generate almost \$90,000 in cumulative wealth if she had relied on

stock market investments during these 11 years instead of savings bonds. The potential value is eroded by the years spent using a non-bank check casher, but the greater wealth-building potential of the stock market means that these losses are not as severe as they would be with bond investments.

The potential wealth from high-cost short-term loan fees

The \$6.7 billion currently being spent on short-term payday loans could also build a substantial amount of wealth over time if it were invested in bonds or a diversified portfolio of stock. That this is a much larger sum than the \$1.5 billion spent at non-bank check-cashing establishments suggests, too, that it could potentially build an even greater amount of wealth over time. Yet some pawnshop and payday loans are not optional loans for customers because they provide emergency cash, and may also be used by consumers as a last resort because of problems resulting from poor credit card management. In many ways, then, capturing the savings from payday loans—even though they are a much greater value than the fees paid for check cashing—may be even more difficult.

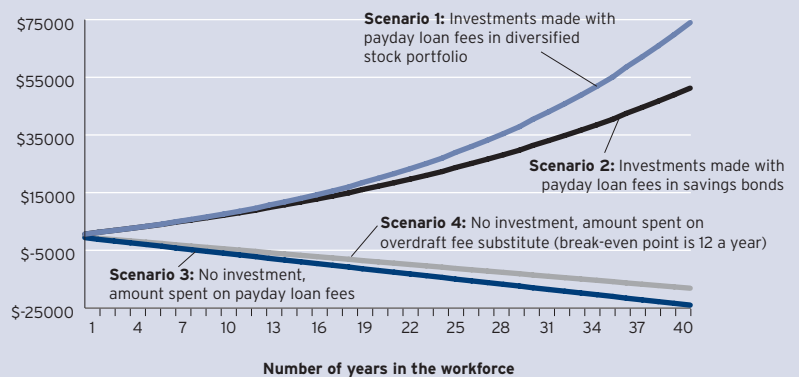
Nonetheless, because efforts by both banks and credit unions to sell a lower-cost alternative to payday loans are gathering market momentum, it is realistic to assume that not only could this high-cost product be substituted with lower-cost alternatives, but also that some of the ensuing savings could be captured for additional investments in the market. That looks even more promising because of the fact that product substitutes like the widely cited North Carolina State Employees Credit Union (NCSECU) alternative have a built-in savings component.⁷² Like captured check-cashing fees, this modest amount of money can be converted into a significant amount of wealth over time if current payday loan customers are linked by informed institutions to savvy market choices.

To illustrate these effects, we consider the savings potentially created for the typical payday loan customer, who earlier research indicates pays about \$50 for every loan and buys about 12 loans a year.⁷³ This adds up to about \$600 a year for short-term payday loans. If that money were moved 12 times a year instead in the diversified portfolio outlined above, this former payday loan customer would make about \$75,000 over his career. That wealth would rapidly dissipate, however, if he regularly relied on an expensive overdraft funds policy as a substitute for payday loans; in most cases, in fact, payday loans are preferable to expensive overdraft protection plans.

Because we expect most payday loan customers may instead prefer to substitute their use of these loans with a lower-cost alternative, we also consider the potential wealth-building effects created if the NCSECU payday loan alternative were available in the markets where the 22,894 payday loan establishments are located. In this case, he could be expected to build about the same amount of wealth over time as if he had completely ended their payday loan consumption.

We also consider the effects of both scenarios if this former payday loan customer decided instead to use the less risky EE Savings Bond. If the customer ended his use of payday loans, he would build about \$50,000 in savings during his 40-year work career. If he instead used the NCSECU alternative, he would build only a modestly smaller amount of wealth. Importantly, if this customer did not have this lower-priced alternative, he would be worse off relying on overdraft fees than on payday loans.

Cumulative Wealth Potential from Payday Loan Fees (in 2007 Dollars)



Notes: All figures illustrate cumulative wealth and spending. All amounts are pre-tax (e.g., capital gains) and pre-inflation; both will erode the purchasing power of wealth generated. Investments are made exclusively with potential payday loan fees; account, ETF, and broker fees are factored into estimates; dividends are not reinvested. We also assume an additional annual management fee potentially charged by a financial services firm or intermediary for facilitating a direct market investment. The annual amount spent on payday loan fees by a full-time worker was calculated using industry data suggesting that the average customer takes out 12 loans per year at a typical fee of \$50 per loan, adding up to \$600 per year in loan fees. For specific descriptions of the stock market investment, savings bond, checking account, and non-bank information used in these simulations, see text.

Discussion

There are significant potential savings that can be created for moderate- and lower-income workers today by shifting their demand for high-cost financial services to more affordable financial services. Investing those savings in savings bonds or an exchange-traded funds through a discount broker would translate into even more wealth over time. As important, this paper has found that nearly all of the higher-cost competitors in the basic retail financial services market where these savings would be generated are located within one mile of a bank or credit union branch, suggesting that the retail infrastructure is in place to realize this potential.

That there is the potential for savings and sizeable investment opportunities points to a widely overlooked opening for public and private leaders to promote economic mobility.⁷⁴ Capitalizing on this opening, and realizing its potential, however, will not be remotely easy. High-cost financial service customers are quite diverse and represent different potential value to banks and credit unions, making it important to distinguish segments within the unbanked demographic. More importantly, large shares of U.S. households have trouble building savings and even with cash incentives moderate- and lower-income households still have trouble saving, particularly for long-term financial goals.⁷⁵ The added potential dollars generated every month from utilizing lower-cost financial services may need to go to emergencies or a loaf of bread, a tank of gas, or some other outstanding need.⁷⁶

At the same time, it is a very arduous process to maximize wealth-building opportunities from savings created from lower-cost financial services, pointing to the need for a public-private partnership that could identify ideal opportunities and products for these workers.⁷⁷ It seems unrealistic to assume, for instance, that a newly banked customer would, first, be able to sort through his dozens of options to find the type of optimal checking account we found at a national chain in New York state, carrying no interest, no maintenance fee, and no minimum balance requirements. Second, it is difficult to see how he would be able to discover and then weigh options at the dozens of brokerage houses that exist today, and find the one that is in his best interest. At the same time, even if this individual somehow found his way to this account and firm, it is also difficult to assume that he could then wade through the more than 300 exchange-traded funds that now exist and find the one that has a negligible fee structure and is tied to the returns of the Dow Jones Industrial Index. In fact, it is probably unrealistic that most people would be able to find this information unassisted.⁷⁸

On the product side, it is also pure conjecture about whether the “optimal” and “sub-optimal” checking accounts we relied on in this paper are available in markets besides New York state, although we have no reason to believe that they are not. It also remains an issue for conjecture about the exact share of full-time workers currently relying on check cashers that would actually qualify for a checking account or a short-term loan alternative at a bank or credit union. But their economic circumstances reviewed earlier clearly suggest that most should be able to qualify. Further causes for optimism are the addressable reasons most of these households cite for not utilizing a checking account, reviewed earlier; and that the share of households without a checking account has dropped 40 percent between 1989 and 2004, suggesting a strong underlying market.⁷⁹

Despite the obstacles, what is particularly attractive about promoting savings by lowering financial services costs is that such a strategy could be created without taking away a single dollar currently going toward food, healthcare, education, or other costs of living that have curbed the effectiveness of extant savings initiatives. To realize this potential will take numerous types of policies and strategies, given the diversity of unbanked households and financial institutions.

We believe one of these strategies should be state or local private-public partnerships, because these types of partnerships can be effective at building trust in and overcoming misunderstandings about financial institutions—two primary reasons cited by households for avoiding banks. In particular, governments can utilize their bully pulpits and market knowledge; banks can make use of their profit and their public relations motivations; non-profits can leverage their community expertise and marketing power; and foundations can leverage their analytical capacity.

Potential models are the FDIC’s Alliance for Economic Inclusion effort and the Bank on San Francisco initiative, a private-public partnership designed to reduce the number of unbanked households in the city of San Francisco.⁸⁰ In just the first 14 months of this campaign, the city of San Francisco has helped to open low-fee checking accounts for about 22 percent of its households without bank

accounts. Survey evidence indicates that these households maintain an average balance of \$730 and rarely overdraw or close their accounts. The city has achieved success so quickly because it has combined political and community leaders' interest in reducing poverty and promoting economic mobility with the businesses' interests in both promoting themselves as good corporate citizens and generating additional revenue. Much work remains to be done, but the consumer and business dynamics outlined in this paper indicate that there is a steady wind behind the sails of this partnership to expand in the future.

Moving this model beyond checking accounts by linking gains in income that result from foregoing check-cashing fees to instead make stock or bond investments is a much more ambitious enterprise than signing up folks for checking accounts. But the potential payoffs strike us as too great to not aspire for this type of economic mobility partnership.

Among the basic steps that we envision such a state or local public-private partnership would want to take include taking an inventory of a) available basic financial service products in a community; b) the companies selling these products, their retail locations, and the proximity of those locations to this demographic; and c) the number and types of potential customers. Next, a campaign would want to d) assess the appropriateness of extant products and, where necessary, negotiate with financial institutions to either offer or more aggressively (and effectively) market a more appropriate basket of financial products for moderate- and low-income customers. A partnership would also have to e) assess the appropriateness of the hours of service during which these products are accessible, along with the customer service and related distributional and access-related issues. Where necessary and economically feasible, the partnership would need to work with financial institutions to improve the efficacy of market access.

Alongside that effort, this partnership will need community partners who are ready and willing to f) market these products in the communities they represent and g) work with potential customers to address the lack of trust in and misperceptions about banks, along with the other consumer dynamics that were outlined in the market description above. Inclusion of community groups and elected officials in a public-private partnership could go a long way toward fostering the trusted intermediary needed to address many of these issues. If and where feasible, leaders may want to identify different segments within this potential market and strategically address segments one at a time, depending on the available resources.

Next, this partnership would need to h) identify a marketing company or strategy to fuel the necessary demand for these products. One option here is to create a label or an industry seal that could be affixed by financial institutions onto products that are deemed appropriate earlier on in this partnership. In this way, the partnership would be able to cut through the confusion associated with the number of choices available in the market today and clearly illuminate for these customers a path through the financial services market that can produce wealth over time.

Finally, and perhaps most importantly, this partnership will have to i) track the progress made and j) regularly evaluate the appropriateness of any of the decisions reached at the above stages. In this way, the partnership can be nimble enough to keep pace with the market dynamics, and also create the necessary information to evaluate program successes and failures.

Through this type of partnership, particularly in combination with additional efforts to address other market segments, the savings and wealth-building potential outlined in this paper might be realized. Even if it is not, connecting more moderate- and lower-income households to basic financial services at banks and credit unions can help raise living standards of these households, and may help increase economic activity in moderate- and low-income communities. The retail infrastructure exists to do this. There are also clear business and consumer dynamics in motion making this retail market more competitive. Private and public leaders now have proven models in place to accelerate this market trend and render more affordable financial services for these workers.

**Appendix 1. Distribution of Financial Services Across the United States,
by Type and Median Neighborhood Income**

	Median Neighborhood Income				Overall
	Low Income	Lower Middle Income	Higher Middle Income	High Income	
Number of people per...					
Mainstream financial service	2,292	2,517	2,808	2,796	2,606
Bank	2,789	2,947	3,254	3,131	3,035
Credit union	12,853	17,240	20,469	26,127	18,396
Alternative financial service	3,429	4,837	6,931	14,026	5,849
Check casher	6,659	9,440	12,449	20,989	10,809
Payday lender	7,482	9,258	14,056	37,084	12,285
Pawnbroker	12,419	22,004	41,129	126,279	27,048
Alternative short-term lender	4,925	6,847	10,859	29,274	8,843
Number of locations per 10,000 people					
Mainstream financial services	4.4	4.0	3.6	3.6	3.8
Banks	3.6	3.4	3.1	3.2	3.3
Credit unions	0.8	0.6	0.5	0.4	0.5
Alternative financial services	2.9	2.1	1.4	0.7	1.7
Check cashers	1.5	1.1	0.8	0.5	0.9
Payday lenders	1.3	1.1	0.7	0.3	0.8
Pawnbrokers	0.8	0.5	0.2	0.1	0.4
Alternative short-term lenders	2.0	1.5	0.9	0.3	1.1
Number of...					
Mainstream financial services	26,043	27,683	26,573	27,642	107,941
Banks	21,399	23,642	22,928	24,684	92,653
Credit unions	4,644	4,041	3,645	2,958	15,288
Alternative financial services	17,405	14,403	10,764	5,510	48,082
Check cashers	8,964	7,380	5,993	3,682	26,019
Payday lenders	7,977	7,525	5,308	2,084	22,894
Pawnbrokers	4,806	3,166	1,814	612	10,398
Alternative short-term lenders	12,120	10,174	6,871	2,640	31,805
Proportion of neighborhoods which contain at least one...					
Mainstream financial service	56.1%	62.3%	61.0%	58.8%	59.6%
Bank	49.9%	57.7%	57.1%	55.5%	55.1%
Credit union	19.6%	18.8%	17.3%	14.5%	17.6%
Alternative financial service	43.9%	38.7%	33.9%	21.1%	34.4%
Check casher	30.6%	26.8%	23.5%	16.0%	24.2%
Payday lender	23.6%	23.5%	19.4%	9.2%	18.9%
Pawnbroker	19.6%	13.7%	8.6%	3.3%	11.3%
Alternative short-term lender	33.2%	29.7%	24.0%	11.2%	24.5%

**Appendix 1. Distribution of Financial Services Across the United States,
by Type and Median Neighborhood Income (continued)**

	Median Neighborhood Income				
	Low Income	Lower Middle Income	Higher Middle Income	High Income	Overall
Distribution of financial services					
Mainstream financial services	24.1%	25.6%	24.6%	25.6%	100.0%
Banks	23.1%	25.5%	24.7%	26.6%	100.0%
Credit unions	30.4%	26.4%	23.8%	19.3%	100.0%
Alternative financial services	36.2%	30.0%	22.4%	11.5%	100.0%
Check cashers	34.5%	28.4%	23.0%	14.2%	100.0%
Payday lenders	34.8%	32.9%	23.2%	9.1%	100.0%
Pawnbrokers	46.2%	30.4%	17.4%	5.9%	100.0%
Alternative short-term lenders	38.1%	32.0%	21.6%	8.3%	100.0%
Proportion of alternative financial services operating near banks and credit unions					
In neighborhoods where banks or credit unions					
are also present	75.9%	78.2%	78.0%	80.7%	77.6%
Check cashers	68.2%	72.7%	73.1%	78.3%	72.0%
Payday lenders	83.1%	84.1%	83.4%	85.3%	83.7%
Pawnbrokers	81.0%	79.4%	79.8%	81.5%	80.3%
Alternative short-term lenders	82.5%	82.9%	82.5%	84.6%	82.8%
Within one mile of a bank or credit union					
Check cashers	94.3%	92.4%	92.6%	92.8%	93.1%
Payday lenders	95.5%	94.2%	94.1%	94.4%	94.6%
Pawnbrokers	94.2%	91.8%	91.1%	91.2%	92.7%
Alternative short-term lenders	92.9%	91.1%	92.0%	91.8%	92.0%
Proportion of neighborhoods...					
...which contain both a bank or credit union and an alternative financial service	29.8%	28.2%	25.1%	16.3%	24.9%
...which contain an alternative financial service only	14.1%	10.5%	8.8%	4.7%	9.5%
...which contain a bank or credit union only	26.3%	34.1%	35.9%	42.5%	34.7%
...which contain or are located near a bank or credit union	87.0%	81.6%	81.3%	79.7%	82.4%
...which contain a check casher and a bank or credit union	19.9%	19.0%	16.9%	12.3%	17.0%
...containing a check casher which also contain or are located near a bank or credit union	94.3%	92.4%	92.6%	92.8%	93.1%
...which contain a check casher, and do not contain a bank or credit union	10.7%	7.8%	6.7%	3.7%	7.2%
...containing a payday lender which also contain or are located near a bank or credit union	95.5%	94.2%	94.1%	94.4%	94.6%
...containing a pawnshop which also contain or are located near a bank or credit union	94.2%	91.8%	91.1%	91.2%	92.7%

Source: Analysis of data from the U.S. Census Bureau, the Federal Deposit Insurance Corporation, infoUSA, and state licensing departments

Notes: This analysis includes all establishments for which we had geographic data; a number of establishments were excluded as a result of missing address information. Neighborhood income represented by census tract. Census tracts with populations smaller than 100 are not included in this analysis. Income groups were determined using national neighborhood income quartiles where median neighborhood income is greater than \$0 (low income is \$37,146 or less; lower middle income is between \$37,147 and \$48,258; higher middle income is between \$48,259 and \$64,190; and high income is \$64,191 or greater). Alternative short-term lenders include businesses that offer payday and/or pawn loans. Neighborhoods in this category either contain or are located a maximum of three miles from a bank or credit union. Financial services data are current as of 2006; income data are from 1999 and have been adjusted to 2006 dollars using the Bureau of Labor Statistics' CPI Research Series.

Appendix 2. Historical Distribution of Banks Across the United States in 1996 and 2006, by Year and Median Neighborhood Income

	Median Neighborhood Income				
	Low Income	Lower Middle Income	Higher Middle Income	High Income	Overall
Number of people per bank (1999 population)					
1996	2,905	3,315	3,869	4,321	3,572
2006	2,789	2,947	3,254	3,131	3,035
Number of banks per 10,000 people (1999 population)					
1996	3.4	3.0	2.6	2.3	2.8
2006	3.6	3.4	3.1	3.2	3.3
Number of banks					
1996	20,544	21,018	19,285	17,885	78,732
2006	21,399	23,642	22,928	24,684	92,653
Proportion of neighborhoods which contain at least one bank					
1996	49.4%	55.8%	53.1%	48.2%	51.6%
2006	49.9%	57.7%	57.1%	55.5%	55.1%
Proportion of neighborhoods which do not contain at least one bank					
1996	50.6%	44.2%	46.9%	51.8%	48.4%
2006	50.1%	42.3%	42.9%	44.5%	44.9%
Proportion of neighborhoods contain or are located near a bank					
1996	84.1%	77.2%	76.0%	71.6%	77.2%
2006	84.9%	79.2%	79.2%	77.9%	80.3%
Distribution of banks					
1996	26.1%	26.7%	24.5%	22.7%	100.0%
2006	23.1%	25.5%	24.7%	26.6%	100.0%

Source: Analysis of data from the U.S. Census Bureau and the Federal Deposit Insurance Corporation

Notes: Neighborhood income represented by census tract. Census tracts with populations smaller than 100 are not included in this analysis. Income groups were determined using national neighborhood income quartiles where median neighborhood income is greater than \$0 (low income is \$37,146 or less; lower middle income is between \$37,147 and \$48,258; higher middle income is between \$48,259 and \$64,190; and high income is \$64,191 or greater). Bank location data are from 1996 and 2006; income data are from 1999 and have been adjusted to 2006 dollars using the Bureau of Labor Statistics' CPI Research Series. All per-capita analyses are based on tract population in 1999. Our inventory of bank locations in 1996 excludes 1,799 branches for which address data are missing. Neighborhoods in this category either contain or are located a maximum of three miles from a bank.

Appendix 3. Check Cashing Regulations, by State

State	Maximum finance rate and fees
Alabama	Not regulated
Alaska	Not regulated
Arizona	3% or \$5, whichever is greater, on government checks
Arkansas	5% of government checks; 10% of personal checks and money orders; and 6% of all other checks (payroll, cashier's checks, traveler's checks, insurance checks, etc.) \$10 - to hold personal checks \$5 - one-time account setup fee \$5 - I.D. card replacement fee
California	3% (with I.D.) or 3.5% (without I.D.) or \$3, whichever is greater, on government and payroll checks; 12% of personal checks \$15 - bounced check fee \$10 - one-time account setup fee
Colorado	Not regulated
Connecticut	1% of government checks; 2% of all other checks
Delaware	2% or \$4, whichever is greater
District of Columbia	5% of government and payroll checks, 7% of insurance checks, 10% of personal checks and money orders; or \$4, whichever is greater
Florida	3% (with I.D.)/4% (without I.D.) of government checks, 10% of personal checks and money orders, 5%/6% of all other checks; or \$5, whichever is greater
Georgia	3% of public assistance and social security checks, 10% of personal checks and money orders, 5% of all other checks; or \$5, whichever is greater
Hawaii	3% of public assistance and social security checks, 10% of personal checks and money orders, 5% of all other checks; or \$5, whichever is greater \$10 - one-time account setup fee \$5 - I.D. card replacement fee
Idaho	Not regulated
Illinois	1.4% of checks under \$500, plus a \$0.90 service charge; 1.85% of checks greater than \$500 1% or \$0.50, whichever is greater, is the limit for businesses whose primary service is not check cashing
Indiana	10% or \$10, whichever is greater, on personal checks; 5% or \$5, on all other checks
Iowa	No limit
Kansas	Not regulated
Kentucky	No limit
Louisiana	2% of public assistance and social security checks, 10% of all other checks; or \$5, whichever is greater
Maine	3% (with I.D.)/4% (without I.D.) of public assistance and social security checks, 10% of personal checks and money orders, and 5%/6% of all other checks; or \$5, whichever is greater
Maryland	2% or \$3, whichever is greater, on government checks; 10% or \$5 of personal checks; 4% or \$5 of all other checks \$5 - one-time membership fee
Massachusetts	No limit
Michigan	Not regulated
Minnesota	No limit
Mississippi	3% of government checks, 10% of personal checks, 5% of all other checks and money orders; or \$5, whichever is greater
Missouri	Not regulated
Montana	Not regulated
Nebraska	Not regulated
Nevada	No limit
New Hampshire	Not regulated
New Jersey	2% of checks drawn on a financial entity in N.J., 1% of checks payable to recipients of aid to families with dependent children (AFDC), 1.5% of checks payable to recipients of supplemental security income or social security
New Mexico	Not regulated
New York	1.64% or \$1, whichever is greater

Appendix 3. Check Cashing Regulations, by State (continued)

State	Maximum finance rate and fees
North Carolina	3% of government checks, 10% of personal checks, 5% of all other checks and money orders; or \$5, whichever is greater
North Dakota	5% of personal checks, payroll checks, traveler's checks, money orders, or drafts; 3% of state or federal checks; or \$5, whichever is greater
Ohio	3% of state and federal government checks
Oklahoma	Not regulated
Oregon	2% (with I.D.)/2.5% (without I.D.) of government checks, 3%/3.5% of payroll checks, and 10 percent of all other checks; or \$5, whichever is greater
Pennsylvania	2.5% of government checks, 3% of payroll checks, 10% of personal checks \$10 - one-time new customer fee
Rhode Island	3% of public assistance and social security checks, 10% of personal checks and money orders, 5% of all other checks; or \$5, whichever is greater
South Carolina	2% or \$3, whichever is greater, on government and payroll checks, 7% or \$5 on all other checks and money orders
South Dakota	Not regulated
Tennessee	3% or \$2, whichever is greater, on state/federal checks, 10% or \$5 on personal checks and money orders, 5% or \$5 on all other checks \$10 - one-time membership fee \$20 - bounced check fee
Texas	Not regulated
Utah	No limit (Note: Entities that charge less than 1% or \$1, whichever is greater, are not regulated)
Vermont	3% or \$2, whichever is greater, on state/federal checks, 10% or \$5 on personal checks and money orders, 5% or \$5 on all other checks \$10 - one-time membership fee
Virginia	No limit
Washington	No limit
West Virginia	1% or \$1, whichever is greater
Wisconsin	No limit
Wyoming	Not regulated

Sources: Individual state statutes

Note: These regulations are current as of October 2007.

Appendix 4. Payday Lending Regulations, by State

State	Maximum loan amount	Loan term	Maximum finance rate and fees	Finance charge for 14-day \$100 loan	APR for 14-day \$100 loan
Alabama	\$500	10-31 days	17.5% and 3% per month after default	\$17.50	456%
Alaska	\$500	Min: 14 days	\$5 plus the lesser of of \$15 per \$100, or 15%	\$20.00	520%
Arizona	\$500	Min: 5 days	15% of check	\$17.65	459%
Arkansas	\$400	6-31 days	10% of check plus \$5 (with I.D.) or \$10 (without I.D.)	\$22.22	579%
California	\$300	Max: 31 days	15% of check	\$17.65	459%
Colorado	\$500	Max: 40 days	20% for the first \$300, plus 7.5% for amount exceeding \$300	\$20.00	520%
Connecticut			Prohibited*		
Delaware	\$500	Max: 60 days	None specified	No limit	No limit
District of Columbia ¹			Prohibited*		
Florida	\$500	7-31 days	10% plus a verification fee	\$15.00	390%
Georgia			Prohibited*		
Hawaii	\$600	Max: 32 days	15% of check	\$17.65	459%
Idaho	\$1,000	None specified	None specified	No limit	No limit
Illinois	\$1,000 or 25% of gross monthly income, whichever is less	13-45 days	\$15.50 for every \$100	\$15.50	403%
Indiana	\$500, not to exceed 15% of gross monthly income	Min: 14 days	15% for amounts less than \$250, 13% for \$251-\$400, 10% for \$401-\$500	\$15.00	390%
Iowa	\$500	Max: 31 days	\$15 for amounts less than \$100, and \$10 for every \$100 thereafter	\$16.67	433%
Kansas	\$500	7-30 days	15%	\$15.00	390%
Kentucky	\$500	14-60 days	\$15 for every \$100	\$17.65	459%
Louisiana	\$350	60 days	\$5 documentation fee plus the greater of 16.75% of check value or \$45. After default, 36% for the first year, and 18% per year thereafter	\$25.00	650%
Maine			Prohibited*		
Maryland			Prohibited*		
Massachusetts			Prohibited*		
Michigan	\$600	Max: 31 days	15% of first \$100, 14% of second \$100, 13% of third \$100, 12% of fourth \$100, 11% of fifth \$100, 11% of sixth \$100, plus database verification fee	\$15.00	390%
Minnesota	\$350	Max: 30 days	\$5.50 for amounts less than \$50, 10% of amount plus \$5 for \$51-\$100, 7% of amount (min. \$10) plus \$5 for \$101-\$250, 6% (min. \$17.50) plus \$5 for \$251-300. After default, 2.75% per month	\$15.00	390%
Mississippi	\$400	Max: 30 days	18% of check	\$22.00	572%
Missouri	\$500	14-31 days	75% of initial loan amount	\$75.00	1980%
Montana	\$300	Max: 31 days	25% of check	\$25.00	650%
Nebraska	\$500	Max: 31 days	\$15 for every \$100, or pro rata for any part thereof	\$17.65	459%
Nevada	25% of expected gross monthly income	60 days	None specified (After default, equal to or less than the prime rate at the largest bank in Nevada, plus 10%)	No limit	No limit
New Hampshire	\$500	7-30 days	None specified (After default, 6% per year)	No limit	No limit
New Jersey			Prohibited*		
New Mexico	None specified	None specified	No limit	No limit	No limit
New York			Prohibited*		
North Carolina			Prohibited*		
North Dakota	\$500	Max: 60 days	20% of check, plus databasing fee	\$20.00	520%
Ohio	\$800	Max: 6 months	\$10 for every \$100, plus 5% per month	\$15.00	390%

Appendix 4. Payday Lending Regulations, by State (continued)

State	Maximum loan amount	Loan term	Maximum finance rate and fees	Finance charge for 14-day \$100 loan	APR for 14-day \$100 loan
Oklahoma	\$500	12-45 days	\$15 for every \$100 until \$300, then \$10 for every \$100	\$15.00	390%
Oregon ²			Prohibited*		
Pennsylvania			Prohibited*		
Rhode Island	\$500	Min: 13 days	15% of check	\$15.00	390%
South Carolina	\$300	Max: 31 days	15% of check	\$17.65	459%
South Dakota	\$500	None specified	None specified	No limit	No limit
Tennessee	\$500	Max: 31 days	15% of check or \$30, whichever is less	\$17.65	459%
Texas	None specified	7-31 days	\$10 per loan plus 48% annual interest	\$12.00	309%
Utah	None specified	Max: 12 weeks	No usury limit	No limit	No limit
Vermont			Prohibited*		
Virginia	\$500	Min: 7 days	15% of check	\$15.00	390%
Washington	\$700	Max: 45 days	15% of check for first \$500, then 10% of remaining value	\$15.00	390%
West Virginia			Prohibited*		
Wisconsin	None specified	None specified	No limit	No limit	No limit
Wyoming	None specified	Max: 1 month	20% of check or \$30, whichever is greater	\$30.00	780%

Sources: All regulation information is taken from the Consumer Federation of America's Payday Loan Consumer Information website (www.paydayloaninfo.org), except where indicated:¹ Council of the District of Columbia Legislative Information Management System;² 74th Oregon Legislative Assembly House Bills 2202 and 2203

Note: Payday lending regulation is current as of October 2007. *Payday lending in these states is prohibited either explicitly in law or in effect via a small loan rate cap.

Endnotes

- Stephens Inc., "An Overview of the Alternative Financial Services Industry" (2007). Available from the authors upon request. Also see Brian Grown and Keith Epstein, "The Poverty Business." *BusinessWeek*, May 21, 2007, pp. 56-67. Note that this is not to say that current unbanked customers would absolutely pay less overall for using a bank account or credit card instead. The simulations in this paper make this point clear, as does emerging evidence that a minority of banked (and perhaps potentially a minority of unbanked too) are heavy users of overdraft fees, which can out-value the cost of check cashing, particularly if combined with other account fees. But this statement is intended to state the fact that the costs of these same or comparable services vary across these different types of institutions.
- Ibid, Stephens Inc.; authors' analysis of data from infoUSA, the Federal Deposit Insurance Corporation (FDIC), and state regulatory departments; available from the authors upon request.
- Mark Flannery and Katherine Samolyk, "Payday lending: Do the costs justify the price?" (Washington: FDIC, 2005).
- Sheila C. Bair, "Low Cost Payday Loans: The Opportunities, the Obstacles" (Baltimore: Annie E. Casey Foundation, 2005). Note that there are plenty of other constraints, however, which a) can drive up prices for comparable products and b) limit the availability of lower-priced substitutes in this market segment.
- Authors' analysis of the Federal Reserve Board's 1989, 1992, 1995, 1998, 2001, and 2004 Surveys of Consumer Finances. Note that there is evidence that some banked households may underutilize their accounts. For more in-depth reviews of this market, and related policy, please refer to numerous publications by Michael S. Barr, a University of Michigan Professor of Law, cgi2.www.law.umich.edu/_FacultyBioPage/facultybiopagenew.asp?ID=125 (October 2007); John P. Caskey, a Swarthmore College Professor, www.swarthmore.edu/SocSci/jcaskey1/vita.pdf (October 2007); the Center for Financial Services Innovation, www.cfsinnovation.com (October 2007); economists at the Federal Reserve (e.g., Sherrie L. W. Rhine and William H. Greene, "The Determinants of Being Unbanked for U.S. Immigrants," and Jeanne M. Hogarth and Kevin H O'Donnell. 1999. "Banking Relationships of Lower-Income Families and the Government Trend toward Electronic Payment." *Federal Reserve Bulletin*, 459-74. *Journal of Consumer Affairs* 40 (1) (2006): 21-40; and economists at the World Bank (e.g., Tova Maria Solo, Clemente Ruiz Duran, and John P. Caskey, "The urban unbanked in Mexico and the United States." The World Bank Policy Research Working Paper 3835, 2006). Also see Nicolas P. Retsinas and Eric S. Belsky, eds., *Building Assets, Building Credit: Creating Wealth in Low-Income Communities* (Washington: Brookings, 2004).
- Matt Fellowes and Mia Mabanta, "Borrowing to Get Ahead, and Behind: The Credit Boom and Bust in Lower Income Markets" (Washington: Brookings Institution, 2007). Note that it is not at all clear from the available evidence as to whether revolving credit lines are substitutes or merely additional short-term credit products.
- For more information, please refer to the FDIC Advisory Committee on Economic Inclusion (Come-IN), established by Chairman Sheila C. Bair and the FDIC Board of Directors in November 2006, at www.fdic.gov/about/comein/index.html (October 2007).

8. Stephens Inc., "An Overview of the Alternative Financial Services Industry."
9. This impression has at least something to do with the fact that there has been no nationwide assessment of the new basic retail financial services infrastructure in the United States prior to this paper. Instead, most extant literature has been based on a sample of metro areas. Please see, for instance: Matt Fellowes, "From Poverty, Opportunity: Putting the Market to Work for Lower Income Families" (Washington: Brookings Institution, 2006); National Community Reinvestment Coalition (NCRC), "Are Banks on the Map? An Analysis of Bank Branch Locations in Working Class and Minority Neighborhoods" (2007). Note, however, that there are nationwide assessments of the distribution of bank branches, and that one of the longstanding findings is that although lower-income neighborhoods have fewer bank branches than those with a higher income, there are more per-capita banks in these neighborhoods. This latter measure is a much more fair and accurate assessment of branch dispersal. See, for instance: Robert B. Avery and others, "Changes in the Distribution of Banking Offices," *Federal Reserve Bulletin* (1997). For another consideration of geographic dispersion, see: Stephen M. Graves and Christopher L. Peterson, "Predatory Lending and the Military: The Law and Geography of 'Payday' Loans in Military Towns," *Ohio State Law Journal* 66 (2005): 653.
10. Note that there is a literature that has illustrated the potential of mobile technology to create competition for banking services (so called m-banking) in the absence of branches. This work has found that it is more cost effective from a bank's perspective to rely on m-banking rather than branches. Because much of this literature has focused on international financial access issues, it is a helpful contrast to note that banks in America opened more than 10,000 branches between 1996 and 2006. Much work remains to be done to explore the power of this technology, along with the potential business and consumer economics that may drive and inhibit it. For an interesting recent review of this and other related financial access issues, see: Michael S. Barr, Anjali Kumar, and Robert Litan, ed., *Building Inclusive Financial Systems: A Framework for Financial Access* (Washington: Brookings, 2007).
11. This is a relatively new, but already quite large, field of inquiry. A few samples of recent work include: Esther Duflo and others, "Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block" *Quarterly Journal of Economics* 121 (4) (2006):1311-46; Daniel Schneider and Peter Tufano, "New Savings from Old Innovations: Asset Building for the Less Affluent." In Julia Sass Rubin, ed., *Financing Low-Income Communities: Models, Obstacles, and Future Directions* (New York: Russell Sage Foundation, 2007); Mark Schreiner and Michael Sherraden, *Can the Poor Save?: Saving and Asset Building in Individual Development Accounts* (Edison, NJ: Aldine Transaction, 2006).
12. This section provides a very brief overview of this literature, along with some updated information. For in-depth assessments of this market, please refer to numerous publications by Barr, at cgi2.www.law.umich.edu/_Faculty-BioPage/facultybiopagenew.asp?ID=125 (October 2007); the Center for Financial Services Innovation, www.cfsinnovation.com (October 2007); economists at the Federal Reserve (e.g., Rhine and Greene, "The Determinants of Being Unbanked for U.S. Immigrants"); and economists at the World Bank (e.g., Solo, Ruiz Duran, and Caskey, "The urban unbanked in Mexico and the United States"). Also see: Nicolas P. Retsinas and Eric S. Belsky, eds., *Building Assets, Building Credit: Creating Wealth in Low-Income Communities* (Washington: Brookings, 2004); *Bringing More Unbanked Americans Into the Financial Mainstream*, Hearing before the Senate Committee on Banking, Housing, and Urban Affairs, 107 Cong. 2 sess. (Government Printing Office, 2003).
13. Authors' analysis of the Federal Reserve Board's 2004 Survey of Consumer Finances (SCF). First, note that we are only interested in households without checking accounts in this paper, since we want to compare that banking market with the non-bank market for check cashing. If we were to include transaction accounts, like savings and call accounts, the estimate of the size of the unbanked would be slightly less. Second, there are actually many more unbanked adults than this 22 million figure because not all adults that are living in households with at least one adult with a bank account are banked (or need to be banked). For that reason, estimates based on "adults" overstate the size of the true underlying market. Also note that some estimates based on other data are even higher, purportedly because the SCF does not account for the undocumented immigrant population, which some of these others do. Unfortunately, there is no clear way to assess the rigor of the underlying methods used to arrive at these larger estimates, so we elected to go with perhaps the more conservative estimate provided in the SCF. For a helpful discussion of the limitations of the SCF please see: Arthur B. Kennickell, "How Do We Know If We Aren't Looking? An Investigation of Data Quality in the 2004 SCF." Paper prepared for the 2006 Annual Meetings of the American Statistical Association (Federal Reserve Board, 2006).
14. Stephens Inc., "An Overview of the Alternative Financial Services Industry." Note that these data indicate that the average transaction cost at a check-cashing establishment is about \$8.40. This is substantially less than what it would cost a full-time unbanked worker earning the average income to rely on a check casher, as we note below. Among the reasons why this is a conservative estimate of the average transaction cost are a) check cashers cash all types of checks, some of which at a fee much lower than that of payroll checks; b) these businesses also sell money orders and transmittals, which available data indicate are less expensive services; and c) the variability of rates outlined in Appendix 3 may also be at work. For all of these reasons, we are explicit that no one knows the average check-cashing fee, but we do know the average fee that it would cost a full-time unbanked worker earning the average income to rely on a check casher. Also note that there is some evidence indicating that even households with bank accounts use check cashers, so the market for non-bank check-cashing establishments cannot be perfectly accounted for in an estimate of the number of unbanked households. Along those same lines, not all unbanked households realistically need a bank account, nor can they be realistically signed up for one (e.g., probably most undocumented immigrants), so any estimate of the market size should be treated cautiously.
15. The maximum allowed rate for payroll checks in 24 states and the District of Columbia ranges between 1-10 percent of the face value of a paycheck (see Appendix 3). In the 26 states that do not have a maximum allowed rate, we substitute the median rate among the regulated states (5

percent) to arrive at an estimated average rate for payroll checks of 4.54 percent. We assume that this is a conservative estimate because the 26 states that do not set ceiling rates likely have higher payroll rates than the median across the country. Next, we consider evidence from the Federal Reserve's 2004 Survey of Consumer Finances that indicates the average income among households that lack a checking account and include a worker is \$27,000. We assume a tax rate of 15 percent to arrive at a take-home pay (prior to any tax credits or benefits that they may qualify for) of \$22,950, or a biweekly, post-tax paycheck of \$883. Applying the median rate of 4.54 percent of the face value of the check suggests that the average rate is about \$40 per payroll check. An even better measure would be weighted by the state distribution of check-cashing customers, but these data were not available at the time of publication. Note that there is wide state variation around this median. Customers in New York will pay substantially less, for instance, than customers in California. Finally, it is worth noting that 18.9 percent of households without a checking account and with a full-time worker have two adults working full-time; the remaining 81.1 percent have only one adult working full-time. Within this later category, 54 percent include only one adult that is working full-time and no other adults are in the household, 35 percent include only one adult that is working full-time and any other adults are unemployed, and the remaining 11 percent include a full-time and a part-time worker. Average annual income across these categories ranges between \$23,000 and \$35,000. For the sake of simplicity, we rely on the approximate average across these household types—\$27,000, or \$22,950 post-tax.

16. Authors' analysis of the Federal Reserve Board's 2004 Survey of Consumer Finances (SCF).
17. In a maximum likelihood model that we designed to estimate the probability of being unbanked, the educational attainment of the household head was a strong, robust predictor of household banked status.
18. However, bank fraud has been on the rise in recent years. For more information, see American Bankers Association, "Deposit Account Fraud Survey Report" (2004); Board of Governors of the Federal Reserve System, "Report to the Congress on the Check Clearing for the 21st Century Act of 2003" (2007).
19. To produce our national census of financial service providers, we gathered street address information for each of the 156,023 mainstream and alternative financial service locations from state and federal licensing agencies and infoUSA, a private data vendor. Our list of bank branches comes from the FDIC's directory of insured institutions; credit unions from infoUSA; and check cashers, payday lenders, and pawnshops from state licensing agencies or, where official state data were not available, infoUSA. Using the addresses in these extensive lists, we then assigned a latitude-longitude coordinate to each location, allowing us to examine the distribution of different financial service branches across geography and neighborhood income. As might be expected when working with any large dataset that has been culled from numerous sources, there are a handful of caveats to note. First, because check cashers, payday lenders, and pawnshops are regulated at the state level, licensing data are uneven across states. As a result, states with stringent reporting requirements will generally maintain more vigilant inventories than states in which reporting is either not required or not enforced. In total, we relied exclusively upon state data in seven states (Indiana, Louisiana, Missouri, New Jersey, Ohio, Pennsylvania, and South Carolina), exclusively upon infoUSA data in nine states (Florida, Hawaii, Idaho, New Mexico, South Dakota, Utah, Vermont, West Virginia, and Wyoming) and the District of Columbia, and combined state and private data for the remaining 34 states. Due to our heavy reliance on business registry data from private sources—which are often not as comprehensive as those maintained by state agencies—the numbers produced in these analyses should be viewed as conservative estimates. Second, we found in a number of cases that the types of services offered had been misreported as a result of either self-reporting errors or erroneous classification on the part of the licensing administrator. In such cases, services offered by each business were cross-checked using additional resources including online directories, industry websites, and, when necessary, by calling the business itself (over 1,000 calls were made directly to establishments and the headquarters of chains). Finally, in determining the geographic coordinates for all types of financial service locations, we encountered a small percentage of establishments that lacked sufficient address information; because we were unable to match these establishments to census tracts, they have been excluded from these analyses.
20. Our definition of neighborhood is the census tract, which typically contains between 2,500 and 8,000 people. The average population in the census tracts used in this analysis (i.e., where population is at least 100 and where median household income is not missing) is 4,341 people. When considering retail dispersion, this is an ideal measure of a neighborhood because it controls for population density, which any retail business takes into account before make a site location decision. Because there is one check casher for every 10,809 residents, if these businesses were distributed equitably across neighborhood income categories, we should expect to find about one check casher in every two census tracts in each neighborhood income category.
21. Authors' analysis of data from infoUSA, FDIC, and state regulatory departments; available from the authors upon request.
22. For more information, please refer to the Center for Financial Services Innovation, www.cfsinnovation.com (October 2007).
23. Among other issues cited (in this survey of participants at their 2006 annual conference), these three reasons are heavily cited, and are also the most frequently cited reasons in conversations that we have had with the banking side of depository institutions about their hesitations in this segment of the market. Crime is also another commonly cited reason why banks will not move into this segment more aggressively. For the full account of this survey, and related information, see: Katy Jacob, "Highlights from the Inaugural Underbanked Financial Services Forum" (Chicago: Center for Financial Services Innovation, 2006).
24. NCRC, "Are Banks on the Map? An Analysis of Bank Branch Locations in Working Class and Minority Neighborhoods" Also see: Comments of the National Consumer Law Center, Consumer Federation of America, Consumers Union, National Association of Consumer Advocates, Woodstock Institute to the Federal Reserve System, Docket No. R-1197, PROPOSED AMENDMENTS TO REGULATION DD, August 6, 2004; Jean Ann Fox and Patrick Woodall, "Overdrawn: Consumers Face Hidden

- Overdraft Charges From Nation's Largest Banks" (Washington: Consumer Federation of America, 2005). For an interesting analysis of why these and other fees systematically vary across banks, see: Timothy H. Hannan, "Retail deposit fees and multimarket banking," *Journal of Banking & Finance* 30 (9) (2006): 2561-2578. Large banks also face a clear market incentive to capture the wealthiest share of the 10 percent of all deposits in this country to minimize costs and maximize opportunities to cross-sell other financial service products, among other reasons. The Community Reinvestment Act mitigates this incentive, but it's not clear how powerful this tool actually is at accomplishing this goal.
25. Authors' analysis of the Federal Reserve Board's 1989, 1992, 1995, 1998, 2001, and 2004 Surveys of Consumer Finances (SCF). Note that some estimates based on other data are even higher, purportedly because the SCF does not account for the undocumented immigrant population, which some of these others do. Unfortunately, there is no clear way to assess the rigor of the underlying methods used to arrive at these larger estimates, so we elected to go with perhaps the more conservative estimate provided in the SCF. For a helpful discussion of the limitations of the SCF please see: Kennickell, "How Do We Know If We Aren't Looking? An Investigation of Data Quality in the 2004 SCF."
 26. Government Accountability Office, *Electronic Transfers: Use by Federal Payment Recipients has Increased but Obstacles to Greater Participation Remain* (Government Accountability Office, 2002). Also see: Michael A. Stegman, *Savings for the Poor: The Hidden Benefits of Electronic Banking* (Washington: Brookings, 1999).
 27. Authors' analysis of the Federal Reserve's 1989, 1992, 1995, 1998, 2001, and 2004 Surveys of Consumer Finances.
 28. Charles M. Greenberg, "Money Market Fund Industry: History and Related Developments," *Journal of Financial Planning* 4 (1) (1983): 40-48; also see: Robert E. Litan and Jonathan Rauch, *American Finance for the 21st Century* (Washington: Brookings, 1998).
 29. Katy Jacob and Melissa Koide, "Accessing the American Dream: Affinity Marketing Partnership Strategies for Financial Institutions and Nonprofits" (Chicago: Center for Financial Services Innovation, 2006).
 30. Federal Reserve Bank of New York, "Stored Value Cards: An Alternative for the Unbanked?" (2004); Katy Jacob, "Stored Value Cards: A Scan of Current Trends and Future Opportunities" (Chicago: Center for Financial Services Innovation, 2004). But also see: Stanley Sienkiewicz, "Prepaid Cards: Vulnerable to Money Laundering?" (Federal Reserve Bank of Philadelphia, 2007).
 31. Stephens Inc., "An Overview of the Alternative Financial Services Industry." Note that we are consciously shifting between the term "credit" and "loans" even though these are, strictly speaking, different types of trade lines. The reason is that, while these products are technically loans, many people today are using these products as credit, blurring the two product lines. Also note that this estimate does not include all high-cost short-term loans, only those that can be regularly accessed and about which there are reliable data available.
 32. We update the numbers reported in Stephens Inc., "An Overview of the Alternative Financial Services Industry." But this is a very crude method because a) not all of the adult population has a credit report, b) it's not at all clear that there is a causal effect between low scores and demand, and c) it's not at all clear that every adult needs a short-term loan. For more information about credit reports and scores, please see: Matt Fellowes, "Credit Scores, Reports, and Getting Ahead in America" (Washington: Brookings Institution, 2006). At the same time, estimates based on "adults" overstate the size of the true underlying market, since not all adults that fit the above criteria would need one of these products. Also note that some estimates based on other data are even higher, purportedly because they account for the undocumented immigrant population. Unfortunately, there is no clear way to assess the rigor of the underlying methods used to arrive at these larger estimates, so we elected to go with perhaps the more conservative estimate provided by FICO.
 33. According to www.bankrate.com's weekly national survey of large banks and thrifts conducted on October 17, 2007, the average fixed rate on credit cards was 11.88 percent and the average variable rate was 13.69 percent. Please see Appendix 4 for a full review of current state laws related to payday loan rates.
 34. Stephens Inc., "An Overview of the Alternative Financial Services Industry"; Flannery and Samolyk, "Payday lending: Do the costs justify the price?"; Bair, "Low Cost Payday Loans: the Opportunities, the Obstacles."
 35. Stephens Inc., "An Overview of the Alternative Financial Services Industry"; authors' analysis of data from infoUSA, FDIC, and state regulatory departments; available from the authors upon request. Our estimated average payday loan fee is approximately the same average fee found to exist in other reports. See, for instance, the 2005 Washington state payday lending report published by the Washington State Department of Financial Institution, available at www.dfi.wa.gov/cs/pdf/2005_payday_report.pdf (October 2007). Note, too, that the Community Financial Services Association, the national payday loan association, estimates that its market size is about \$40 billion, available at www.cfsa.net/about_payday_advance.html, (October 2007). See also, for helpful market data: Uriah King, Leslie Parrish and Ozlem Tanik, "Financial Quicksand: Payday lending sinks borrowers in debt" (Washington: Center for Responsible Lending, 2006).
 36. Uriah King, Leslie Parrish and Ozlem Tanik, "Financial Quicksand: Payday lending sinks borrowers in debt" (Washington: Center for Responsible Lending, 2006).
 37. But, for an excellent related analysis, please see: Ellen Seidman, Moez Hababou and Jennifer Kramer, "Getting to Know Underbanked Consumers: A Financial Services Analysis" (Chicago: Center for Financial Services Innovation, 2005).
 38. Gregory Elliehausen, "Do High Price Credit Customers Know What They Are Doing?" Working Paper 2006-WP-02 (Networks Financial Institute, 2006).
 39. Authors' analysis of data from infoUSA, FDIC, and state regulatory departments; available from the authors upon request.
 40. Relevant pawnshop regulations from every state are available from the authors upon request.
 41. Flannery and Samolyk, "Payday lending: Do the costs justify the price?"
 42. Among a number of other issues cited (in this survey of conference participants), these three reasons are most heavily cited, and are also the most frequently cited reasons in conversations that we have had with the banking

- side of depository institutions about their hesitations in this segment of the market. Crime is also another commonly cited reason why banks will not move into this segment more aggressively. For the full account of this survey, and related information, see: Jacob, "Highlights from the Inaugural Underbanked Financial Services Forum."
43. NCRC, "Are Banks on the Map? An Analysis of Bank Branch Locations in Working Class and Minority Neighborhoods" Also see: Eric Halperin and Peter Smith, "Out of Balance: Consumers pay \$17.5 billion per year in fees for abusive overdraft loans" (Washington: Center for Responsible Lending, 2007).
 44. Stephens Inc., "An Overview of the Alternative Financial Services Industry"; Flannery and Samolyk, "Payday lending: Do the costs justify the price?"
 45. Stephens Inc., "An Overview of the Alternative Financial Services Industry."
 46. For more information, please refer to the FDIC Advisory Committee on Economic Inclusion (ComE-IN), www.fdic.gov/about/comein/index.html (October 2007).
 47. This is one reason why the Center for Financial Services Innovation has recently launched a new survey of "underbanked" consumers, which will include customers of high-cost basic retail financial services.
 48. Stephens Inc., "An Overview of the Alternative Financial Services Industry." But this is a very crude method because a) not all of the adult population has a credit report and b) it's not at all clear that there is a causal effect between low scores and demand. For more information about credit reports and scores, please see: Fellowes, "Credit Scores, Reports, and Getting Ahead in America."
 49. Matt Fellowes, "Making Markets an Asset for the Poor," *Harvard Law and Policy Review* 1 (2) (2007): 433-456.
 50. Fellowes, "From Poverty, Opportunity: Putting the Market to Work for Lower Income Families."
 51. Authors' analysis of data from infoUSA, FDIC, and state regulatory departments; available from the authors upon request. Because of the high share of unbanked consumers who indicate that they do not use banks because they do not trust these institutions, we focus on distributional channels where people could work on building trust in the community. This means we do not account for automatic teller machines. Please see an earlier citation about m-banking substitutes.
 52. Neighborhoods in this category either contain or are located a maximum of three miles from a bank or credit union branch. For this latter group, we drew a one mile radius around each of the 107,941 branch locations and specified the model to count neighborhoods as being "near" each of these branches if there were no more than a two-mile distance between the circumference around each branch and the edge of the overlapping or adjacent neighborhood. This means that a household could be a maximum distance of three miles from the branch location to be counted as living "near" the branch. According to the Federal Reserve's 2004 Survey of Consumer Finances, the median distance between a household with a checking account and the branch they rely on is three miles.
 53. NCRC, "Are Banks on the Map? An Analysis of Bank Branch Locations in Working Class and Minority Neighborhoods"; Fellowes, "From Poverty, Opportunity: Putting the Market to Work for Lower Income Families."
 54. See: Matt Fellowes, "Making Markets an Asset for Lower-Income Workers." Testimony before the California Assembly Banking and Finance Committee (2007).
 55. Please see Appendices 3 and 4 for more information about this state variation.
 56. See, for instance: Duflou and others, "Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block"; Jeanne Hogarth, Amberly Hazembuller, and Michael Wilson, "How Much Can the Poor Save?" Working draft prepared for CFED/Federal Reserve "Closing the Wealth Gap" Research Forum (CFED/Federal Reserve 2006); Schreiner and Sherraden, *Can the Poor Save?: Saving and Asset Building in Individual Development Accounts*; Schneider and Tufano, "New Savings from Old Innovations: Asset Building for the Less Affluent."
 57. Note that there needs to be more work in this area. We wonder, for instance, if long-term savings may have been more difficult to foster in extant work because of the adequacy of long-term marketing materials, or because of potentially higher costs associated with determining long-term financial objectives and strategies.
 58. All of the estimates in this section are pre-tax and expressed in 2007 dollars.
 59. Authors' analysis of the Federal Reserve's 2004 Survey of Consumer Finances.
 60. The maximum allowed rate for payroll checks in 24 states and the District of Columbia ranges between 1-10 percent of the face value of a paycheck (see Appendix 3). In the 26 states that do not have a maximum allowed rate, we substitute the median rate among the regulated states (5 percent) to arrive at an estimated average rate for payroll checks of 4.54 percent. Because of evidence that these businesses set rates at the maximum allowed rate, we can assume that this is a conservative estimate because the 26 states that do not set ceiling rates likely have higher payroll rates than the median across the country. Next, we consider evidence from the 2004 Survey of Consumer Finances that indicates the average income among households that lack a bank account and include a worker is \$27,000. We assume a tax rate of 15 percent to arrive at a take-home pay (prior to any tax credits or benefits that they may qualify for) of \$22,950, or a biweekly, post-tax paycheck of \$883. Applying the median rate of 4.54 percent of the face value of the check suggests that the average rate is about \$40 per payroll check. An even better measure would be weighted by the state distribution of check-cashing customers, but these data were not available at the time of publication. For that reason, and because we have good reason to suspect that our median 4.54 rate is downwardly biased, this estimate should be treated as a conservative estimate.
 61. This is a model for other states around the country. See: State of New York Banking Department, www.banking.state.ny.us/bf.htm (October 2007).
 62. We assume that an account with these features would not be profitable without an overdraft fee, but our happy to be proven otherwise.
 63. Authors' analysis of the Federal Reserve's 2004 Survey of Consumer Finances.
 64. We are not aware of any rigorous evidence that points to the average number of times that an individual who was formally unbanked, or who has a strong probability of unbanked, overdraws their bank account. Since we do

- know that the median number of payday loans taken out by customers is 12 per year, and some have compared these two products, we use 12 overdrafts for comparison. It may be that an individual who overdraws their account at this rate would lose their account, but we lack rigorous information to support this conclusion.
65. We chose an EE savings bond instead of the more liquid I saving bond because we are interested in the long-term wealth-building potential of these households, and the EE bond's long-term qualities are modestly more attractive. For a review of the differences between these bond products, see: www.treasurydirect.gov/indiv/research/indepth/ebonds/res_e_bonds_eecomparison.htm (October 2007).
 66. Note that there is a maximum of \$30,000 that can be purchased in paper bonds, and another \$30,000 in electronically-issued bonds. In this simulation, we assume this threshold is lifted during the course of this worker's 40-year work career.
 67. Note that it would have been a much easier task to divert this money into an optional cash purchase plan (OCPP) with a company offering dividend reinvestment plans (DRIPs) instead, since most offer decimal purchases of shares, but we wanted to choose a diversified investment vehicle.
 68. Readers who are uncomfortable with this assumption can annualize this percentage into the total potential wealth-building opportunity created from these savings.
 69. We assume that the average entry fee is \$149, based on the current performance of an ETF tied to the Dow Jones Industrial Average and the cost of each trade at the discount brokerage firm. After splits, wage and price inflation, and other countervailing variables, we assume that these prices are constant over time. Based on this entry fee, we estimate that this low-income worker would be able to make seven investments over the course of a year on average, again assuming that this entry price moves above and below the current price but tracks an average around this amount over time. We also assume that the price of the account is fixed over time. The ETF charges a maintenance fee, which is deducted out of the dividend; we assume all left over money is not reinvested. We use the historic returns of this average during the 20th century to project future growth in value. Note that all projected wealth is pre-tax and pre-inflation. We also assume that no interest is paid on the deposits that accumulate between investments, and that the paper or electronic transfer of money into the investment account is costless over time, based on the terms of the optimal checking and discount brokerage accounts we have identified for this simulation.
 70. Authors' analysis of the Federal Reserve's 2004 Survey of Consumer Finances.
 71. In particular, we assume that they cycle every four years between working part-time, full-time, and being unemployed. This means they start their career working four years in a part-time job, then a full-time job, and are then unemployed. The average incomes of households without checking accounts that fit each of these household job profiles were used. We conservatively assumed that they could only use a checking account with a bank during the 12 year period of their work career where they held a full-time job.
 72. Bair, "Low Cost Payday Loans: The Opportunities, the Obstacles."
 73. See, for instance, the 2005 Washington state payday lending report published by the Washington State Department of Financial Institution, available at www.dfi.wa.gov/cs/pdf/2005_payday_report.pdf (October 2007) and Uriah King, Leslie Parrish and Ozlem Tanik, "Financial Quicksand: Payday lending sinks borrowers in debt" (Washington: Center for Responsible Lending, 2006).
 74. This is not to suggest that there have not been initiatives to address this opportunity. During the 1980s numerous states passed basic banking and lifeline banking laws. During the 1990s the Electronic Fund Transfer Act was among numerous related initiatives. Yet, these issues have persisted and most policymakers we interact with at the federal, state, and local level continue to overlook this opportunity. For more in-depth reviews of this market, and related policy, please refer to numerous publications by Barr, cgi2.www.law.umich.edu/_Faculty-BioPage/facultybiopagenew.asp?ID=125 (October 2007); Caskey, www.swarthmore.edu/SocSci/jcaskey/vita.pdf (October 2007); the Center for Financial Services Innovation, www.cfsinnovation.com (October 2007); economists at the Federal Reserve (e.g., Rhine and Greene, "The Determinants of Being Unbanked for U.S. Immigrants"); and economists at the World Bank (e.g., Solo, Duran, and Caskey, "The urban unbanked in Mexico and the United States"). Also see: Retsinas and Belsky, *Building Assets, Building Credit: Creating Wealth in Low-Income Communities*.
 75. See, for instance: Duflo and others, "Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block"; Schneider and Tufano, "New Savings from Old Innovations: Asset Building for the Less Affluent."
 76. As far as we are aware, a rigorous study of the actual uses of savings created by lower-cost financial services does not exist. But, given what knowledge of saving behavior exists, it is safe to assume that these savings are not generally used for savings, let alone market investments.
 77. That about 50 percent of unbanked households in the SCF indicate that they formerly had a bank account might also suggest that some of these households would have trouble accessing these accounts because of negative ChexSystems records. But we currently lack rigorous information about the duration of that former banked status, the extent and timing of cycling in and out of banked status, the population of unbanked households that cycle in, fall out of, or never participate in bank accounts, as well as the causes of this behavior.
 78. We suspect this because vast shares of U.S. households do not have stock market investments when theory suggests they should and because, among those that are invested, vast shares are under-diversified.
 79. See earlier section of paper.
 80. For more information, please refer to the website of the San Francisco city government at www.sfgov.org/site/bankonsf_index.asp?id=46628 (October 2007). For a review of this and related initiatives, please see: Fellowes, "From Poverty, Opportunity: Putting the Market to Work for Lower-Income Families." Also see the FDIC's Alliance for Economic Inclusion, www.fdic.gov/consumers/community/AEI/index.html (October 2007); and Anne Stuhldreher. 2006. "Bank on San Francisco: An Initiative to Bring All Residents into the Financial Mainstream." Washington, DC: CFED.

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