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Mobile Banking: The Answer for the Unbanked in America?

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Mobile Banking: The Answer for the Unbanked in America?

Cover Page Footnote
Assistant Professor, Texas Tech University School of Law. J.D., University of Pittsburgh. The author wishes to thank the following for their invaluable feedback and advice during the preparation of this article: Mehrsa Baradaran, Julie Andersen Hill, conference and workshop participants at George Washington University Law School’s Center for Law, Economics & Finance (especially Lisa M. Fairfax, Heidi Mandanis Schooner, and Arthur E. Wilmarth, Jr.), the SCALS faculty exchange program and Southern University Law Center, and The Federalist Society for Law & Public Policy Studies. Thanks are also due to Rishi R. Batra, Elizabeth Caulfield, Sally Henry, Meredith Miller, Brie D. Sherwin, and the Texas Tech University School of Law for their assistance and support. All errors remain, of course, my own.

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MOBILE BANKING: THE ANSWER FOR THE UNBANKED IN AMERICA?

Catherine Martin Christopher†

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A bank account is one of the most basic financial tools available, yet in the United States, one in eight people over the age of fifteen do not have one. People without bank accounts are considered “unbanked.” Many more Americans are considered “underbanked,” meaning they do have bank accounts, but they still use alternative financial service providers (such as prepaid cards, check cashers, and payday lenders) to meet their financial needs. These alternative financial service providers are economically inefficient for consumers, but for people without meaningful access to bank accounts, they are a necessary substitute.

Various governmental and private enterprises have attempted to expand banking access to unbanked and underbanked people, but no systemic improvements have been made. This Article suggests that a burgeoning technology—the mobile phone—is now sufficiently pervasive in American culture that it can be used to bring traditional bank accounts to those currently underserved.

Part I of this Article analyzes the unbanked and underbanked populations in the United States: who they are, why they are unbanked, and what the implications are of being so. Part II describes the current state of mobile banking in America, and examines its potential to increase financial inclusion. Part III discusses whether mobile banking for the poor can be commercially viable. Part IV identifies features that should or could be incorporated into mobile banking products designed specifically for the unbanked.

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4. See Barr, supra note 2, at 130 n.16.
5. See id. at 124, 134–35.
6. See infra Part III.A–B.
I. THE UNBANKED IN AMERICA

About 10% of the adult population in the United States is unbanked, meaning they do not currently have a bank account.\(^8\) Two-thirds of these people have never had a bank account.\(^9\)

In addition to those who are unbanked, another 17% of American adults are underbanked, meaning they do have a bank account, but they utilize alternative financial service providers, such as check cashers, payday lenders, pawn shops, auto title lenders, or prepaid cards.\(^10\) Unbanked people either use alternative financial service providers or simply operate in cash.\(^11\) The FDIC estimates that 29% of unbanked households are cash only.\(^12\)

In America, there are undeniable—and troubling—correlations between banking status and race, age, employment, and other characteristics.\(^13\) According to the FDIC, 20% of Black households and 18% of Hispanic households are unbanked, compared with just 3.6% of white households.\(^14\) Being unbanked also skews young: households where the householder is under the age of twenty-four are unbanked at a rate of 15.7%, and households headed by someone between twenty-five and thirty-four are unbanked at a rate of 12.5%.\(^15\) Households experiencing unemployment are unbanked at a rate of 23.0%, and households where the householder does not have a high school degree are unbanked at 25.1%.\(^16\) Immigration status also negatively correlates

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\(^8\) BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, CONSUMERS AND MOBILE FINANCIAL SERVICES 2014, at 5 (Mar. 2014), http://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201403.pdf (finding that 10.5% of the adult population was unbanked in 2013). Unsurprisingly, estimates vary. See, e.g., FDIC, 2013 FDIC NATIONAL SURVEY OF UNBANKED AND UNDERBANKED HOUSEHOLDS 15 (Oct. 2014) https://www.fdic.gov/householdsurvey/2013report.pdf (finding that 7.7% of households—not individuals—were unbanked in 2013); THE WORLD BANK, supra note 2, at 171 tbl.B.1 (finding that 12% of Americans over the age of fifteen are unbanked). Whatever the exact figure, Americans are unbanked at a disgraceful rate when compared to other developed nations: fewer than 5% of Canadians, fewer than 3% of British residents, and fewer than 1% of Australians are unbanked. Id. at 167, 171.

\(^9\) See, e.g., FDIC, 2013 FDIC NATIONAL SURVEY OF UNBANKED AND UNDERBANKED HOUSEHOLDS 15 (Oct. 2014) https://www.fdic.gov/householdsurvey/2013report.pdf (finding that 7.7% of households—not individuals—were unbanked in 2013); THE WORLD BANK, supra note 2, at 171 tbl.B.1 (finding that 12% of Americans over the age of fifteen are unbanked). Whatever the exact figure, Americans are unbanked at a disgraceful rate when compared to other developed nations: fewer than 5% of Canadians, fewer than 3% of British residents, and fewer than 1% of Australians are unbanked. Id. at 167, 171.


\(^11\) Id. The FDIC is statutorily required to conduct a bi-annual survey on efforts being made to bring the unbanked into the formal banking system. See 12 U.S.C. § 1831z(a)(1) (2012).

\(^12\) See FDIC, supra note 8, at 5. Immigration status is implicated as well. See Barr, supra note 2, at 131–32 (noting that immigrants may face linguistic barriers that compound other barriers to becoming banked).

\(^13\) FDIC, supra note 8, at 16 tbl.A-1a.

\(^14\) Id. at 17 tbl.A-1a.

\(^15\) Id.
with being unbanked, as foreign-born non-citizens living in the United States are unbanked at a rate of 22.7%, compared to 6.9% of U.S. born citizens and 4.7% of foreign-born citizens.\textsuperscript{17}

Even more significant than race, age, immigration, or employment status, however, is income level. Households earning less than $15,000 per year are unbanked at a rate of 27.2%, and households earning between $15,000 and $30,000 per year are unbanked at a rate of 11.4%.\textsuperscript{18} Overall, unbanked Americans are disproportionately nonwhite, young, and poor.\textsuperscript{19}

\textbf{A. Why People Are Unbanked}

When the unbanked are asked why they do not have a bank account, the most common answer is that they do not have enough money to warrant an account.\textsuperscript{20} Many unbanked people, further, cite high or unpredictable account fees as a reason for not having a bank account.\textsuperscript{21} These individuals, mostly poor, typically transact relatively small amounts of money, and they find (or fear) that minimum balance requirements, overdraft fees, and other bank account features are more expensive than the value of the account.\textsuperscript{22} In short, most unbanked Americans feel a bank account costs more than it is worth.\textsuperscript{23}

Some unbanked people had bank accounts previously, indicating that account retention, as well as account acquisition, is a problem. The Federal Reserve found in 2013 that 34% of the then-unbanked population previously had a bank account.\textsuperscript{24} The most common reasons for discontinuing bank account use are the same as those of people who have never had bank accounts: customers do not have enough money to warrant the account, account fees are too high or unpredictable, or the customers do not like dealing with or do not trust banks.\textsuperscript{25}

These previously banked individuals may have discontinued their accounts for their own reasons or had their accounts terminated for misuse of the account.\textsuperscript{26} Misuse of a bank account, unfortunately, can have long-term

\begin{itemize}
\item \textsuperscript{17} Id. There are complex issues at play in the intersection of banking and immigration status, see, e.g., id. at 28, but discussion of immigration-specific issues is beyond the scope of this Article.
\item \textsuperscript{18} Id. at 17 tbl.A-1a.
\item \textsuperscript{19} Id. at 16–17 tbl.A-1a.
\item \textsuperscript{20} \textit{Board of Governors of the Federal Reserve System}, supra note 8, at 5 fig.A (noting that 25% of survey respondents identified lack of funds as the most important reason for not having an account); FDIC, supra note 8, at 24 (57.5% of households “did not feel they had enough money to keep in an account or to meet a minimum balance requirement[,]” and 35.6% cited lack of money as the main reason they were unbanked).
\item \textsuperscript{21} FDIC, supra note 8, at 24 (30.8% of unbanked households cite this as a reason for being unbanked, while 13.4% cite it as the main reason).
\item \textsuperscript{22} See Choe, supra note 1, at 367.
\item \textsuperscript{23} See Barr, supra note 2, at 131–32.
\item \textsuperscript{24} \textit{Board of Governors of the Federal Reserve System}, supra note 8, at 5 box 1.
\item \textsuperscript{25} FDIC, supra note 8, at 25 figs.3.6 & 3.7.
\item \textsuperscript{26} See Peggy Delinois Hamilton, \textit{Why the Check Cashers Win: Regulatory Barriers to Banking the Unbanked}, 30 W. New Eng. L. Rev. 119, 123–24 (2007).
\end{itemize}
ramifications. Most banks rely on ChexSystems, a consumer reporting “software that records consumers with poor banking practices” or who have engaged in “account mishandling.” ChexSystems retains information for five years, and subsequent banks use this information in their screening process, allowing them to refuse an account to flagged individuals. While this system presumably keeps “high-risk or fraudulent consumers” out of the banking system, it also punishes those who made innocent mistakes.

Another common reason for being unbanked is a general distrust or dislike of banks. In its biennial survey of unbanked and underbanked Americans, the FDIC found that 34.2% of unbanked respondents cited this as a reason for being unbanked, and 14.9% cited it as the primary reason. Many individuals who previously had bank accounts reported that they “got in trouble,” that is, overdrafting an account and failing—or in some cases refusing—to pay the requisite penalties. These experiences left some people “with strong, negative feelings towards financial institutions.”

The other side of the don’t-like-banks coin is that some people feel that alternative financial service locations provide better service. While the unbanked are driven into using alternative financial services for their transactional needs, underbanked people voluntarily use alternative financial services. This is largely due to increased convenience. Alternative financial service providers are often open longer hours than bank branches and deliver cash or credit on the spot. Alternative financial service providers also typically charge up-front fees, whereas unbanked people often perceive bank accounts as having “penalties and hidden costs.”

Banks, for their part, believe there is little financial incentive to offer traditional banking products specifically to the unbanked. Because unbanked

27. Id. at 123.
28. See Choe, supra note 1, at 367 n.12.
29. See Barr, supra note 2, at 181.
30. See Hamilton, supra note 26, at 123.
31. FDIC, supra note 8, at 24.
33. Id.
35. See Choe, supra note 1, at 365–66.
36. See FDIC, supra note 8, at 4; Barr, supra note 2, at 124 (noting that the underbanked may rely on alternative financial services despite having traditional bank accounts).
37. FDIC, supra note 8, at 63 (noting the convenience of “[m]obile technology,” which “provides consumers with the ability to conveniently conduct transactions and view account balances anytime and anywhere”).
38. See Choe, supra note 1, at 373.
39. Id. at 375, 382.
individuals make such small transactions and carry small balances, banks do not expect significant profit from these customers.  

B. What it Means to be Unbanked

Bank accounts serve several important, if basic, purposes: they offer an opportunity to deposit and save money, access to a secure and inexpensive payment system, physical security, access to credit, and the convenience of locating all these services under one roof at lower costs. In short, banks provide financial and physical security. Alternative financial service providers, on the other hand, offer these services at significant expense or do not offer them at all.

1. Savings and Deposits

Bank accounts facilitate savings because they are a place to deposit and store funds that are not being spent. Savings, in turn, allow individuals to “buy homes, pay for education, or start small businesses; all of which are proven measures to develop assets and accumulate wealth.”

Some deposited funds, typically those in savings accounts, accrue interest. All funds deposited with regulated state and federal banks are, within statutory limitations, insured by the FDIC. Check-cashers, in contrast, do not offer a place to keep funds on deposit, and offer no interest or insurance. While prepaid cards offer a place to keep funds on deposit, they typically do not offer

40. See Baradaran, supra note 34, at 168; Choe, supra note 1, at 367.
41. FDIC, supra note 8, at 13.
42. See id.; Barr, supra note 2, at 134. Banks also offer various federal consumer protections that are guaranteed by law, ensured by supervision, and enforced through ongoing examination. These include disclosures, requirements related to terms and conditions of product offerings, and protection from unfair or deceptive practices and discrimination. In addition, participation in mainstream financial markets improves a consumer’s ability to access a range of financial products and services, develop wealth, build a credit history, and access credit products. FDIC, supra note 11, at 5.
43. See Choe, supra note 1, at 366 (“For example, a person earning $20,000 per year after taxes might pay a total of approximately $400 per year in check-cashing fees.”).
44. See Hamilton, supra note 26, at 124.
45. Id. at 126.
46. See id. at 124. Large depositors can offset any bank account fees with the interest they accrue. See Julie Andersen Hill, Transaction Account Fees: Do the Poor Really Pay More than the Rich?, 15 U. Pa. J. Bus. L. 65, 92 (2012) (recounting how banks attempted to provide other services and free products to large depositors where interest did not offset fees).
48. See Hamilton, supra note 26 at 126–27 (noting that alternative financial institutions offer limited opportunities to save money and are not as strictly regulated as banks).
and they are not insured in the same manner as bank accounts. Bluebird, for instance, offers “pass-through” FDIC insurance, meaning that Bluebird’s parent company, American Express, places Bluebird-deposited funds at FDIC-insured banks. If those banks fail, the FDIC will insure them, but if American Express fails, the funds may not be insured.

2. Payment Systems

Bank accounts, especially transaction accounts, typically allow customers to direct a transaction from their own account to the account of another either by check, debit, or electronic transfer. Most of these services are free—banks typically do not charge a fee for writing a check and the merchant rather than the bank customer typically pays debit fees. Alternative financial service providers, on the other hand, charge significant fees to deliver payments to utility companies, for example, or to issue money orders. Bank transfers can also be arranged and conducted promptly. Checks can be written on the spot and handed over, debit transactions take place almost as quickly as a PIN can be entered, and electronic transfers can be arranged at any time of day on a bank’s website or through a mobile application. Customers of alternative financial service providers are not so lucky; they must go to the

51. See id.
52. See id.
53. See RICHARD SCOTT CARNELL ET AL., THE LAW OF FINANCIAL INSTITUTIONS 43 (5th ed. 2013) ("A transaction account is any account from which a customer may withdraw money by check, electronic transfer, or similar means for payment to others."). For most people, this means a checking account. While the two are not technically the same (a checking account is one kind of transaction account), the difference is not material for the purposes of this Article.
54. See Hill, supra note 46, at 80. Payment processing, from the bank’s perspective, is one of the most expensive aspects of transaction accounts. See id. Even on “free” checking accounts, though, a bank makes money by charging fees, such as those on overdrafts, charging interest on loans of deposited funds, and cross-selling other banking services. See id. at 81–82, 101.
55. See id. at 83. Such “interchange fees” are restricted by regulations promulgated pursuant to the Durbin Amendment of the Dodd-Frank Act. See id.
57. See generally SPENT: LOOKING FOR CHANGE (American Express Travel Related Services Company, Inc. 2014) (exploring issues faced by the underbanked in the United States and highlighting a number of the discrepancies between mainstream banking services and alternative financial service providers).
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center’s physical location and stand in line before they can conduct their business. 59

Cashing paper checks, whether at a bank or at an alternative financial service provider, is economically inefficient when compared to electronic transactions; debit and electronic payments can be processed far more cheaply. 60 By one estimate, every paper check that is replaced by an electronic transfer saves one dollar. 61 By shifting payments from paper checks to electronic transfers, the cost savings and increased efficiency are significant.

3. Security

When funds are on deposit at a bank, they are far safer than when stored at home or in a pocket. Not only does the FDIC insure most deposited funds, but the physical cash is also safer from theft, fire, or natural disaster, simply because the bank building has better security. 63 Patrons of check-cashing stores, on the other hand, are at significant risk of robbery or mugging; it is likely that people walking out of a check-casher have a large amount of cash on their persons, and customers frequently cash paychecks at regular, predictable intervals, increasing their risk of theft. 65

58. See id. at 27:20 (“I got a job in Dallas. While I was there, one of my payments was due. So I called up. They were like, ‘We can[not] take a payment over the phone. You have to come in.’ I said, ‘Well, can I go to one of your sister companies?’ ‘No, you have to come to this store.’”).


60. See Hill, supra note 46, at 80.

61. See Barr, supra note 2, at 141 (citing Deborah Matthews, Financial Institutions Partnering with Corporations: Innovative Strategies for Promoting Direct Deposit, in NACHA, EBT IN THE STATES: SURVEY RESULTS, 2002 ELECTRONIC PAYMENTS REVIEW AND BUYER’S GUIDE 46 (2002)).

62. See Understanding Deposit Insurance, FDIC, www.fdic.gov/deposit/deposits (last visited Jan. 2, 2016) (“The standard insurance amount is $250,000 per depositor, per insured bank, for each account ownership category [e.g., checking, savings, money market deposit, and certificates of deposit].”).

63. See Choe, supra note 1, at 382. Well-meaning people may even remove cash accidentally. See, e.g., Bill Chappell, After Finding $40,000 in Thrift-Store Couch, Roommates Return Money, NPR (May 16, 2014, 12:32 PM), http://www.npr.org/sections/thetwo-way/2014/05/16/313118337/thrift-store-couch-yields-40-000-roommates-return-money (telling the story of a family who upgraded a woman’s sofa, giving the old one to the thrift store without realizing it was stuffed with her life savings).

64. See Barr, supra note 2, at 134; Choe, supra note 1, at 382.

65. See Barr, supra note 2, at 134; Choe, supra note 1, at 382.
4. Access to Credit

For individuals with bank accounts, banks and other regulated financial institutions are often the first stop for reliable, affordable credit.66 Home mortgages and auto loans are available at reasonable interest rates,67 and credit cards provide shorter-term credit for other purchases.68 The unbanked and underbanked, however, must often rely on fringe banking institutions such as payday lenders, auto title loan companies, and pawnshops for credit:

These lenders are often usurious, sometimes predatory, and almost always much worse for low-income individuals than the services offered by traditional banks to their customers. For instance, the average annual income for an unbanked family is $25,500, and about 10% of that income, or $2412, goes to the fees and interest paid to access credit or other financial services—services that those with bank accounts often get for free.69

As with deposits and payment systems, those most in need of credit and least able to pay for it are charged more dearly.70

Because fringe banks do not report loans to credit bureaus, utilizing these services also hinders an individual’s ability to establish his or her own creditworthiness.71 Instead, payday and car title loan customers are often ensnared in a vicious cycle of rolling over their loans time and again, accruing crippling additional fees.72

5. Convenience and Lower Cost

Banks and regulated financial institutions offer numerous services and products, both on their own and through affiliated institutions. They offer multiple access points, with ATMs and expanding Internet and mobile banking services that complement personal interaction at physical branch locations.73 They also offer basic financial services for low or no cost. For example, banks do not charge fees to deposit funds.74 When a paycheck is deposited, the bank customer is entitled to the face amount of the check.75

The unbanked and underbanked, on the other hand, spend considerable amounts of time and effort conducting simple transactions, driving to and from

66. See Choe, supra note 1, at 382.
68. See Barr, supra note 2, at 139–40.
69. Baradaran, supra note 34, at 167.
70. See Barr, supra note 2, at 138–39.
71. See Choe, supra note 1, at 382.
72. See id. at 377.
73. See Barr, supra note 2, at 210–13.
74. See Choe, supra note 1, at 381.
75. See id. at 369–70.
alternative financial service providers, waiting in line, and delivering payments to vendors and creditors. Check-cashers charge significant fees to cash a check, and do not offer a place to keep those funds on deposit. These check-cashing fees are imposed despite the fact that the vast majority of these checks are paychecks and government benefit payments, which carry an extremely low risk of being returned for having insufficient funds. As one observer wrote, “There is absolutely no good reason why a person earning $20,000 per year should spend $240 a year to access their own hard-earned money. This, however, is what millions of Americans are doing.”

Individuals who use check-cashers are effectively paying a fee to access their own money, a fee that banks do not impose. Because the poor are more likely to use check-cashers, while the middle- and upper-class are more likely to use banks, these fees are being paid by those least able to afford them.

II. MOBILE BANKING AS (PART OF) THE SOLUTION

Various efforts have been made over the years to bring the unbanked into the banking system. Some have been public programs, such as Treasury’s First Accounts Program, while others were private or non-profit driven, like Bank on San Francisco and similar programs. While most individual programs are considered “successful,” the continuing high percentage of unbanked Americans demonstrates that there has been no systemic improvement.

Most of these banking programs consisted of big pushes to market existing products to new customers, rather than developing innovative programs or technologies. The First Accounts Program, for example, went as far as to tout...
that most banks were not required to develop new banking products for the targeted new customers.  

Rather than attempt to increase financial inclusion by simply encouraging the unbanked to open existing types of bank accounts, new technology—mobile phones—has the potential to change the relationship between customers and their bank accounts. This different, more useful, and more efficient relationship may serve to incentivize the unbanked to enter the banking system.

Mobile phones are becoming increasingly ubiquitous in the United States. As of January 2014, 90% of all adults have a cell phone, and as of October 2014, 64% have a smartphone. Given this level of penetration, mobile banking may serve as a transformative technology that brings the unbanked and underbanked more fully into the banking system.

A. Mobile Banking Among the Fully Banked and Underbanked

Many banks currently have mobile applications that allow users to access their bank accounts digitally, though mobile banking’s popularity is still nascent. Nearly one quarter of banked households use mobile banking apps to access their accounts, in addition to using other access methods such as tellers, ATMs, and online banking. Among those who use mobile banking, about a quarter use it as their primary banking method. Most mobile banking activity consists of

85. See id. at xi. While the First Accounts program resulted in the opening of more than 37,000 new accounts, information is scarce on how many of those accounts have remained in use over time. See id. at ix.


87. Some literature makes a distinction between mobile banking (conducting account inquiries and transactions between a customer and a bank) and mobile payments (transferring money in exchange for goods and services, which may be conducted by a bank or other mobile payment system). See, e.g., BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 4. The distinction is not especially relevant for this Article, so these activities will be referred to collectively as “mobile banking.”


89. FDIC, supra note 8, at 50. Bank tellers remain the most popular method used to access bank accounts. See id. at 54 fig.8.2.

90. See id. at 55.

91. See id. at 59–60.
checking account balances and transaction history.  Only a quarter (25.5%) of households that use mobile banking deposited a check via mobile.

Mobile banking use is higher among owners of smartphones than owners of feature phones. Whereas 33% of all mobile phone users have used online banking, 51% of smartphone users use mobile banking. This is presumably because the interactive screen and Internet connectivity of a smartphone increase the ease and utility of mobile banking; the visuals of an app may also be more conducive to conducting business than dialing into or texting with a bank’s automated response system. As smartphones become more ubiquitous, mobile banking is likely to become more accepted and commonplace.

Mobile banking—and smartphone ownership—is “highly correlated with age.” Thirty-nine percent of mobile banking users are between eighteen and twenty-nine years old, with another 34% of mobile banking users between thirty and forty-four. This means that 73% of all mobile banking users have not yet celebrated their forty-fifth birthdays.

Interestingly, underbanked individuals tend to be heavier users of mobile banking technology than fully banked individuals. Underbanked households are also more likely than banked households to have access to a mobile phone or smartphone. According to research by the Federal Reserve, “Among the underbanked, 88% have a mobile phone, 64% of which are smartphones. The underbanked population makes substantial use of mobile banking. Almost 39% of the underbanked with mobile phones report using mobile banking in the past 12 months, while 22 percent report using mobile payments.” This suggests that the underbanked are already poised for greater financial inclusion by means of mobile banking.

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92. See id. at 60 (noting that 86% of mobile banking users “monitor bank account balances and recent transactions”); BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 10 fig.3 (noting that 99% of mobile users check account balances and transactional inquiries).
93. FDIC, supra note 7, at 60.
94. See id. at 59 (finding that 23.2% of all banked households used mobile banking in the past twelve months compared to 36.2% of households with smartphones). Feature phones are mobile phones that generally have greater capabilities than standard mobile phones, but “lack advanced connectivity options and a robust operating system [necessary] for third-party application development.” Kevin Khachatryan, Medical Device Regulation in the Information Age: A Mobile Health Perspective, 55 JURIMETRICS J. 477, 479 n.11 (2015).
95. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 7.
96. See FDIC, supra note 11, at 21.
97. See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 10–11 (suggesting that “the convenience of mobile banking has overtaken smartphone adoption as the driving force behind mobile banking adoption”).
98. Id. at 9.
99. See id.
100. FDIC, supra note 8, at 59.
101. See id. at 50 tbl.7.1 (noting that 90.5% of unbanked households have mobile phones, and 64.5% have smartphones, compared to 86.8% and 59.0% of banked households, respectively).
102. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 5 box 1.
B. Mobile Banking Potential for the Unbanked

Mobile banking, as it is currently set up in the United States, is generally a new portal into an existing bank account. Because unbanked individuals do not have access to bank accounts to begin with, however, current mobile banking platforms are not capable of meaningfully increasing financial inclusion among the unbanked. Because the unbanked are disproportionately young, poor, and nonwhite, America verges on having two financial systems: a regulated, affordable, centralized system for the haves, and a patchwork, more expensive, less regulated system for the have-nots.

Several demographic characteristics suggest, however, that with some modifications and improvements to current mobile banking practices, the unbanked are precisely the population that can be reached by mobile phone technology. Rather than create a separate, workaround financial system for the unbanked, mobile technology may be able to bring the unbanked into the traditional banking system.

1. Demographics

Mobile phone users, like the unbanked, are typically young, and data suggest that racial minorities are more likely than whites to use mobile phones and adopt mobile banking practices. The unbanked are also disproportionately poor, and while mobile phone ownership does not positively correlate with low income, such low incomes may not necessarily constitute a hindrance to mobile banking adoption.

Unsurprisingly, the unbanked are less likely than those with bank accounts to have mobile phones. Access to mobile phones, like access to bank accounts, increases with income. However, among people who own mobile phones, there appears to be no correlation with income level and use of mobile banking; that is, poorer people with mobile phones are just as likely to use mobile banking as wealthier people with mobile phones.

Mobile phone ownership skews young. Among individuals under the age of fifty-five, more than 86% have access to a mobile phone. Among those aged

103. Although a small number of banks currently allow accounts to be opened via a mobile phone, this capability is not widely available. See FDIC, supra note 11, at 17.
104. See supra notes 13–19 and accompanying text.
105. See infra Part IV for suggestions and recommendations.
106. See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 21.
107. See id. at 13.
108. See id. at 21; see also FDIC, supra note 11, at 6 box 1.
109. FDIC, supra note 8, at 50 tbl.7.1.
110. See id. (“For example, about 70 percent . . . of households with income below $30,000 had access to a mobile phone, compared to 91.6 percent of households with income of at least $75,000.”).
111. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 10.
112. FDIC, supra note 8, at 50.
forty-five to fifty-four, 62.8% have access to a smartphone.113 Among those younger than forty-five, smartphone ownership jumps to over 72%,114 This is an exciting overlap because young people, who are most likely to have a mobile phone, are also among those most likely to be unbanked.115 Indeed, although the unbanked are less likely than the underbanked or fully banked to have mobile phones, significant numbers of the unbanked do have mobile phones. According to the FDIC’s research, 68.1% of unbanked households have access to a mobile phone, and 33.1% have access to a smartphone.116 Even among households that have never been banked, 61.1% have access to a mobile phone, and 26.0% have access to a smartphone.117 The Federal Reserve’s research shows even higher rates of mobile phone ownership among the unbanked: “Among individuals who are unbanked, 69 percent have access to a mobile phone and 49 percent of these are smartphones.”118

Another promising correlation is that racial minorities, who are more likely to be unbanked, are also more likely to adopt mobile banking than whites.119 For example, while 14% of all mobile phone users are Hispanic, Hispanics conduct 19% of all mobile banking transactions.120 This suggests that if new minority customers can be brought into the banking system, they will adopt and use mobile banking and increase their financial inclusion. Importantly, surveyed unbanked people expressed a willingness to use mobile banking technology: “19 percent [of] unbanked households with mobile phones reported being likely to use mobile banking in the next 12 months[,] compared to 9 percent of fully banked households.”121

In addition, “45 percent of adults with incomes below $30,000 use mostly their phone to access the Internet compared to about a third (34 percent) of all adults.”122 This statistic suggests that for many poor people, online banking—banking from a laptop or desktop computer—is not a feasible method of accessing the banking system. On the other hand, it also means that a large portion of the less affluent already utilize mobile phone technology for Internet access.

113.  Id.
114.  Id.
115.  See supra note 107 and accompanying text.
116.  FDIC, supra note 8, at 50.
117.  Id. (finding that “[a]mong individuals who are unbanked, 69 percent have access to a mobile phone and 49 percent of these are smartphones”).
118.  See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 5 box 1. International experiences, such as those with WIZZIT, demonstrate that feature phones are capable of providing basic services for banking customers. See infra Part II.B.2.a.
119.  See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 10.
120.  See id.
121.  FDIC, supra note 11, at 16.
122.  Id. at 11 (citing MAEVE DUGGAN & AARON SMITH, PEW RESEARCH CTR., Cell Internet Use 2013 (2013), http://www.pewinternet.org/2013/09/16/cell-internet-use-2013/).
2. Utility

The underbanked in America are already poised for greater financial inclusion through mobile banking. They are more likely to have smartphones and more likely than even fully banked households to use mobile banking as their primary banking channel. The question remains, however, whether mobile banking can increase financial inclusion among the unbanked—those who do not have bank accounts already.

Recalling that many unbanked people do not have an account generally because the costs exceed the value, mobile banking may provide sufficiently increased convenience to induce many unbanked individuals to seek bank accounts. Even ignoring the possibility that lower-cost accounts may be feasible, the convenience of having bank access in one’s pocket may increase the value of the account to the point that it exceeds the costs.

Recall also that many unbanked and underbanked individuals use alternative financial services because their hours and locations are more convenient than bank branches or tellers. Mobile banking is even more accessible because it is available any time from the palm of one’s hand. Moreover, mobile banking “provides consumers the ability to act on [account] information conveniently to conduct timely financial transactions that can help them avoid problems such as overdrafts, fraud, and late fees.” Moreover, the account holder’s mobile phone would also provide access to an insured account at a regulated bank, providing “security and storage capability, thus removing the need to store physical cash under the mattress or conceal it on the person.”

Importantly, mobile banking meets the customer where she is. Traditional bank accounts require the customer to go to a branch, ATM, or web browser, while mobile banking is in her pocket. In this way, mobile phone technology has dramatically increased financial inclusion in other countries, and may be

123. See supra notes 94–102 and accompanying text.
124. FDIC, supra note 8, at 63.
125. See supra Part I.A.
126. See infra Part III.A.1.
127. See supra Part I.B.5.
128. See supra notes 36–39 and accompanying text.
129. FDIC, supra note 11, at 11.
130. See id.
131. Senthe, supra note 7, at 7.
able to do so in the United States as well.\textsuperscript{133} Two examples from Africa provide interesting information for American banking.\textsuperscript{134}

\textit{a. WIZZIT}

In South Africa, a country with a population of fifty-two million,\textsuperscript{135} only 53.6\% of individuals age fifteen and over have bank accounts.\textsuperscript{136} However, “the mobile phone penetration rate in South Africa [is] almost 100 percent, thanks in large part to the onset of prepaid services that offer low-cost handsets and the opportunity to buy airtime in advance.”\textsuperscript{137}

In December 2004, a company called WIZZIT entered the market with the soaring mission “[t]o change the world by providing banking opportunities [globally] to the 4 billion unbanked and under-banked through cell phone technology, leading to a reduction of poverty and the creation of economic citizens.”\textsuperscript{138} Despite these global aspirations, WIZZIT so far remains confined to South Africa.\textsuperscript{139}

WIZZIT customers can open bank accounts via their mobile phones by calling in to the company and entering their national identification numbers,\textsuperscript{140} or by a face-to-face meeting with the company’s commissioned employees, called “whizz kids.”\textsuperscript{141} WIZZIT itself does not have a banking license; instead, it partners with or, depending on the source, “piggybacks on” the licensed South African Bank of Athens.\textsuperscript{142}

WIZZIT does not have its own branches or ATMs.\textsuperscript{143} Deposits can be made in person at the branches of partner Absa Bank or at South African post office locations, and electronic deposits can be made by a direct transfer into a WIZZIT

\begin{thebibliography}{99}
\bibitem{133} See \textit{supra} Part II.B.; see also \textit{Ivatura} & \textit{Pickens}, \textit{supra} note 132, at 8–9.
\bibitem{134} See \textit{infra} Part II.B.2.a–b
\bibitem{136} \textit{The World Bank, supra} note 2, at 171 app.b, tbl.B.1.
\bibitem{138} Vision, WIZZIT, www.wizzit.co.za/?q=node/65 (last visited Jan. 2, 2016); see also \textit{Ivatura} & \textit{Pickens, supra} note 132, at 2.
\bibitem{139} History, WIZZIT, http://www.wizzit.co.za/?q=node/197 (last visited Jan. 2, 2016) (stating that WIZZIT is actively looking to expand and has established partnership initiatives in Eastern Europe and other African countries).
\bibitem{140} See \textit{Ivatura} & \textit{Pickens, supra} note 132, at 3.
\bibitem{143} See \textit{Ivatura} & \textit{Pickens, supra} note 132, at 2.
\end{thebibliography}
account.\textsuperscript{144} Cash may be withdrawn at any South African ATM, using a WIZZIT-affiliated debit card,\textsuperscript{145} and peer-to-peer funds transfers can be effected from the customers’ mobile phones.\textsuperscript{146} Funds transfers can be made in exchange for goods and services or to send money to friends and family.\textsuperscript{147} Daily transaction limits are placed on each account; the maximum daily transaction limit is R25,000 (approximately $1,600).\textsuperscript{148}

WIZZIT focuses on keeping user fees and costs low. The sign-up fee is R99.99 (approximately $6.40), which includes the account-opening fee and the cost of the debit card.\textsuperscript{149} Initially, WIZZIT did not charge a monthly fee and did not have a minimum balance, but now it does.\textsuperscript{150} The monthly fee is R19.98 (approximately $1.30), which covers the internet banking services, bank statements, and, oddly, a R5,000 (approximately $320) funeral insurance policy with partner company Sanlam.\textsuperscript{151} The minimum monthly balance is also quite low, at R30.00 (approximately $1.90).\textsuperscript{152} WIZZIT users pay a flat fee for each payment made from their account: WIZZIT-to-WIZZIT transactions cost the sender R3.99 (approximately $0.25), and WIZZIT-to-non-WIZZIT transactions cost the sender R5.99 (approximately $0.40).\textsuperscript{153} WIZZIT accounts with balances over R10,000 (approximately $640) earn 1\% interest.\textsuperscript{154}

Technically, WIZZIT customers can open and utilize accounts even if they do not have mobile phones, but the service is far more convenient and effective with phone access.\textsuperscript{155} It is possible, however, for multiple people to share one mobile phone in order to access different WIZZIT accounts, provided each WIZZIT customer has her own SIM card.\textsuperscript{156} WIZZIT works on older-model

\textsuperscript{144} See Frequently Asked Questions, WIZZIT, http://www.wizzit.co.za/?q=node/76 (last visited Jan. 2, 2016). Deposits made at post offices are reflected in account balances in as little as forty-eight hours. See id.
\textsuperscript{145} See Abbey Stermler & Anjanette H. Raymond, Promoting Investment in Agricultural Production: Increasing Legal Tools for Small to Medium Farmers, 8 OHIO ST. ENTREPRENEURIAL BUS. LJ. 281, 313 (2013); IVATURY & PICKENS, supra note 132, at 2.
\textsuperscript{146} See Frequently Asked Questions, supra note 144.
\textsuperscript{147} See IVATURY & PICKENS, supra note 132, at 2.
\textsuperscript{148} See Frequently Asked Questions, supra note 144. This account-opening fee has roughly doubled since 2006. See IVATURY & PICKENS, supra note 132, at 2.
\textsuperscript{149} See Frequently Asked Questions, supra note 144.
\textsuperscript{150} See IVATURY & PICKENS, supra note 132, at 2; Frequently Asked Questions, supra note 144.
\textsuperscript{151} See Frequently Asked Questions, supra note 144.
\textsuperscript{152} See id.
\textsuperscript{153} See id.
\textsuperscript{154} See id.
\textsuperscript{155} See id.
\textsuperscript{156} See id.
mobile phones and is not limited to a single telecommunications network.\(^ {157} \)
Customer service is provided online or by calling a customer support center.\(^ {158} \)

Customers like WIZZIT because they feel it is inexpensive, secure, convenient, and fast.\(^ {159} \) WIZZIT customers are generally low-income, but they “tend to have higher income and assets than nonusers and also greater financial and technological sophistication.”\(^ {160} \) While “customers must still visit bank branches for cash deposits,” they can save valuable time by “us[ing] their mobile phones to check their account balance, make payments, or transfer money to friends and family.”\(^ {161} \)

A 2011 Harvard Business School case study on mobile banking in Africa was critical of WIZZIT, concluding that WIZZIT failed to offer the payment and transaction services that its customers truly needed.\(^ {162} \) The study reported that “[t]he mistake a lot of us make is to look at the folks at the base of the pyramid and assume they must need the same types of services we need.”\(^ {163} \) On the other hand, any increase in financial inclusion is a good thing, and WIZZIT customers are making more banking transactions per month than non-users.\(^ {164} \)

\( b. \) \textit{M-PESA}

M-PESA is a mobile finance platform based in Kenya.\(^ {165} \) “M-PESA” is short for “mobile money,” “pesa” being the Swahili word for money.\(^ {166} \)

Unlike WIZZIT, which roots its business in the banking industry, M-PESA is fundamentally a telecommunications product.\(^ {167} \) M-PESA was born of the United Kingdom’s Department for International Development, which proposed a poverty-reducing project in partnership with Vodafone.\(^ {168} \) Vodafone then

\(^{157}\) \textit{See} Lawack, \textit{supra} note 141, at 320 n.7.

\(^{158}\) \textit{See} Stermler & Raymond, \textit{supra} note 145, at 313.


\(^{160}\) IVATURY \\& PICKENS, \textit{supra} note 132, at 3.

\(^{161}\) \textit{Id.}

\(^{162}\) \textit{See} Nobel, \textit{supra} note 137.

\(^{163}\) \textit{Id.}

\(^{164}\) IVATURY \\& PICKENS, \textit{supra} note 132, at 4 (“On average, WIZZIT users surveyed appear to conduct more banking transactions per month using the mobile phone than nonusers conduct using all other channels.”).


\(^{166}\) \textit{Id.} at 170.

\(^{167}\) \textit{See} Nobel, \textit{supra} note 137 (explaining that WIZZIT teamed with a bank to provide mobile banking, and that M-PESA teamed with two large telecommunication firms—Vodafone and Safaricom—to provide mobile banking using a phone’s SIM card).

\(^{168}\) \textit{See} Mercy W. Buku \\& Michael W. Meredith, \textit{Safaricom and M-PESA in Kenya: Financial Inclusion and Financial Integrity}, 8 \textit{WASH. J. L. TECH. \\& ARTS} 375, 385 (2013). The project was subsidized by the United Kingdom’s “challenge funds,” which is money earmarked by the British government for funding global poverty-reduction efforts. \textit{Id.}
worked with its affiliate Safaricom, Kenya’s leading mobile phone service provider, with the blessing and support of the Central Bank of Kenya.\textsuperscript{169}

Accounts are easy to open at retail agent offices, which is also where deposits are made.\textsuperscript{170} The company holds the funds in trust for the customer, issuing “e-float” or “e-money” to the customer’s account.\textsuperscript{171} “E-money can then be transferred, used to pay for goods and services, or withdrawn[]”\textsuperscript{172} via a simple mobile phone interface.\textsuperscript{173} Withdrawals can be made at any ATM operated by Pesa Point, a company that partners with Safaricom to offer withdrawal services.\textsuperscript{174} Twenty-five partner banks and over 700 businesses now partner with Safaricom to facilitate bill payments via M-PESA.\textsuperscript{175} More recently, customers are able to earn interest on some accounts.\textsuperscript{176} In order to increase M-PESA’s user accessibility, “all customer communications are currently in both English and Swahili.”\textsuperscript{177}

Originally conceived as a microfinance platform, Vodafone and Safaricom wisely launched a six-month pilot program in October 2005.\textsuperscript{178} During the pilot, the two companies noted that users were finding ways to turn the microloan product into person-to-person transfers; for example, repaying others’ loans in exchange for goods and services or using the repayment and lending features as an “overnight safe.”\textsuperscript{179} This noticeable user behavior indicated that transactional services were far more necessary to the population than the microloans and, as such, M-PESA was reconfigured as a payment system before its national launch.\textsuperscript{180} The same Harvard Business School case study that criticized WIZZIT’s overreach went on to applaud M-PESA’s ability to adapt to better meet its customers’ actual needs.\textsuperscript{181}

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\textsuperscript{169} See \textit{id.} at 386.


\textsuperscript{171} Buku & Meredith, \textit{supra} note 168, at 379.

\textsuperscript{172} \textit{Id.}

\textsuperscript{173} Mas & Morawczynski, \textit{supra} note 170, at 79.

\textsuperscript{174} \textit{See} \textit{id.}

\textsuperscript{175} See Buku & Meredith, \textit{supra} note 168, at 392.

\textsuperscript{176} \textit{See} \textit{id.}

\textsuperscript{177} \textit{Id.} at 389.

\textsuperscript{178} \textit{See} \textit{id.} at 386–88.

\textsuperscript{179} Buku & Meredith, \textit{supra} note 168, at 387 (quoting Nick Hughes & Susie Lonie, \textit{M-PESA: Mobile Money for the “Unbanked”: Turning Cellphones into 24-Hour Tellers in Kenya}, \textit{2 INNOVATIONS} 63, 76 (2007)); see also Mas & Morawczynski, \textit{supra} note 170, at 89 (questioning whether “a service like M-PESA [could] be a useful vehicle for savings”).

\textsuperscript{180} Buku & Meredith, \textit{supra} note 168, at 388. Borrowing services are being reintroduced. \textit{See} \textit{id.} at 392.

\textsuperscript{181} Nobel, \textit{supra} note 137 (highlighting case study author V. Kasturi Rangan, who states that “[t]he beauty of M-PESA is that they understood a fundamental theorem of marketing: understand what your customers really want”); see also Senthe, \textit{supra} note 7, at 11–12 (discussing M-PESA’s “user-driven innovation”).
The M-PESA program has been a fantastic success.\(^{182}\) The full-scale launch of M-PESA occurred in March 2007, and was serving ten million customers by 2010.\(^ {183}\) By 2011, that figure reached fourteen million.\(^ {184}\)

Users have embraced M-PESA because of its efficiency, security, and reliability.\(^ {185}\) Prior to M-PESA, funds transfers had to be conducted at commercial banks (largely unavailable to rural Kenyans),\(^ {186}\) post offices (“costly, slow, and prone to liquidity shortages at rural outlets”),\(^ {187}\) or local courier services (which typically charge high fees and carry significant risk of loss or theft of funds).\(^ {188}\) Now, users conduct two million M-PESA transactions every day, transferring nearly five billion dollars per year—17% of Kenya’s GDP—and conducting more transactions in Kenya than Western Union does globally.\(^ {189}\)

Like WIZZIT, M-PESA’s social justice motivation has been obvious from its inception.\(^ {190}\) The U.K.’s Department for International Development instigated the project and arranged for its initial financing because the Department recognized that “poverty alleviation programs generally require a significant initial investment, but often fail to generate financial returns commensurate with that investment.”\(^ {191}\) Thus, in order to expand financial access to low-income individuals, the access must be inexpensive for providers to put in place.

Interestingly, instead of resisting the competition, commercial banks in Kenya appear eager to partner with M-PESA.\(^ {192}\) This may be because “the average mobile banking transaction [in Kenya] is about a hundred times smaller than the average check transaction . . . and just half the size of the average ATM transaction.”\(^ {193}\) Thus, commercial banks do not feel threatened by the size and scope of the M-PESA market.\(^ {194}\)

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\(^{182}\) See generally Ignacio Mas & Amolo Ng’weno, Three Keys to M-PESA’s Success: Branding, Channel Management and Pricing, 4 J. PAYMENTS STRATEGY & SYS. 352, 352–53 (2010).

\(^{183}\) See Mas & Radcliffe, supra note 165, at 169–70.

\(^{184}\) See id.

\(^{185}\) See id. at 399.

\(^{186}\) See id. at 382–83.

\(^{187}\) See id. at 383; Mas & Radcliffe, supra note 165, at 174.

\(^{188}\) See Buku & Meredith, supra note 168, at 382–83; Mas & Morawczynski, supra note 170, at 78.

\(^{189}\) See id. at 391; Mas & Ng’weno, supra note 182, at 352–53.

\(^{190}\) See Buku & Meredith, supra note 168, at 392–93.

\(^{191}\) See id. at 385.


\(^{193}\) See Buku & Meredith, supra note 168, at 391.

\(^{194}\) See id.
Although “[d]eveloping markets instinctively use Kenya’s M-PESA as a guiding example to embark on mobile banking ventures,”\textsuperscript{195} the success of M-PESA has been difficult to replicate in other countries.\textsuperscript{196} The system’s success in Kenya may be due to the confluence of some important demographic and economic characteristics unique to Kenya. Specifically, Kenya’s population is largely young,\textsuperscript{197} literate, and experienced with using mobile phone technology.\textsuperscript{198} In fact, over 80\% of the population over the age of fifteen has access to a mobile phone.\textsuperscript{199} Furthermore, Safaricom, whose powerful branding is an important part of M-PESA’s success, handles 80\% of all mobile phone business in Kenya.\textsuperscript{200} M-PESA, benefiting from limited (or nearly nonexistent) regulation by the Central Bank of Kenya, was also given the freedom to expand at the outset of the program.\textsuperscript{201} Only later did government regulation and voluntarily imposed anti-money laundering standards arrive.\textsuperscript{202}

C. Potential Roadblocks to Consumer Adoption

Two important problems exist in the United States that may prevent mobile banking from reaching its potential among unbanked customers in America. The first deals with usefulness, the second with security.\textsuperscript{203}

First, although Part II.B.2 discusses the utility of mobile banking in meeting the needs of the unbanked, it is possible mobile banking will not become useful enough to garner widespread adoption. The Federal Reserve’s research indicates that “many consumers say their needs are already being met without mobile banking or payments, that they are comfortable with non-mobile options, and that they do not see a clear benefit from using either service.”\textsuperscript{204} When asked why they do not have a bank account, unbanked Americans commonly
say that they “do not have enough money to put in an account.”

Having a bank account does not automatically increase the amount of money in a household; families living hand-to-mouth may have no need to store money in a bank because they need to spend it as soon as it is earned.

Second, security and privacy concerns may prevent consumers from adopting mobile banking. Many unbanked people generally distrust the banking system, but even those who trust the system may distrust the security of their financial information on a mobile device.

III. COMMERCIAL VIABILITY

Traditionally, banks are reluctant to reach out to poor and unbanked people out of the concern that there are no profits to be made. These trends again raise the problem of dual financial services industries: one for the haves, the other for the have-nots.

In recent years, however, non-bank financial service providers have been actively pursuing these customers. These non-bank financial service providers currently pursuing unbanked customers may finally demonstrate to the banks that profits can be found among this customer base. On the other hand, banks are more restricted by laws and regulations than non-banks, which may prevent them from taking advantage of features the non-banks are currently using to increase profit margins.

If banks will not market products to the poor because of insufficient profit margins, it is appropriate for the public sector to provide assistance. Financial services are such an important part of a household’s economic wellbeing that support or subsidies from the public sector would be warranted. There is precedent for this kind of intervention, and there are ways the public sector can develop and encourage adoption of mobile banking technology, as discussed below.

205. FDIC, supra note 11, at 17.
206. See Barr, supra note 2, at 139 (“Most low- and moderate-income households manage to spend all their income each month. Bank account ownership will not suddenly change that, but account ownership may make it easier for low-income households to manage their finances, save even if in modest amounts, and access lower-cost forms of credit.”) (citations omitted).
207. See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 6.
208. FDIC, supra note 8, at 40.
209. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, supra note 8, at 6.
211. See supra text accompanying note 104.
212. See Barr, supra note 2, at 124, 141–42; see also FDIC, supra note 8, at 8–9, 11.
213. FDIC, supra note 11, at 9, 11.
214. See infra Part III.B.
A. Private Sector

Non-banks are proving that serving low-income customers in volume can be economically feasible. General-purpose reloadable prepaid cards, typically marketed to the unbanked and underbanked, have exploded in popularity.\(^\text{215}\) They function in a similar manner to transaction accounts, in that funds can be deposited with the card issuer, and then withdrawn as cash or used for bill payment.\(^\text{216}\) They are a poor substitute, however, for a transaction account.\(^\text{217}\) Prepaid cards are unregulated and largely uninsured.\(^\text{218}\) Moreover, bringing people into the existing regulated banking system is preferable to creating a work-around system, especially if a bifurcated system segregates the population by race and income level.\(^\text{219}\)

1. Profit in Volume

The prepaid card industry is impressively large and growing faster than any other type of payment.\(^\text{220}\) In 2012, there were over 159 million prepaid cards “in force” (meaning issued, activated, and not expired),\(^\text{221}\) used an average of ten times per month.\(^\text{222}\) Most prepaid customers report using their cards for transaction services “to pay for every day purchases or bills” and “to receive payments.”\(^\text{223}\) Customers report that “put[ting] money in a safe place” is a significantly less popular purpose.\(^\text{224}\) In fact, nearly 60% of unbanked households that use prepaid cards reload them, indicating consistent use and reliance on the card’s transaction features.\(^\text{225}\) However, only 4.2% of unbanked households obtained their prepaid cards at a bank branch.\(^\text{226}\) This evidence suggests that despite the obvious market for, and popularity of, prepaid cards, banks remain largely external to this corner of the economy.\(^\text{227}\)

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215. FDIC, supra note 8, at 29. Nationally, 27.1% of unbanked households have used prepaid cards as of 2013, though there is significant regional variation. See id. at 29, 32. In Oregon, Iowa, and Minnesota, half or more of all unbanked households had used prepaid cards, while in Arizona, North Dakota, and Montana, fewer than one in ten households had done so. See id. at 32.
216. See id. at 29.
217. See infra notes 218–19 and accompanying text.
219. See supra notes 13–19 and accompanying text.
221. Id. at 20–21. Prepaid cards consist of general-purpose cards, private-label cards, and EBT cards. Id. at 36.
222. See id. at 24.
223. FDIC, supra note 8, at 32.
224. Id. at 32.
225. See id. at 37.
226. Id. at 7.
227. See id. at 8.
Prepaid card providers are filling the large need, which American banks are currently not meeting, for transaction services among the unbanked and underbanked. Banks, capitalizing on the volume of transactions to make serving the unbanked economically viable, can and should take part in this business. Moreover, new customers should be encouraged to utilize electronic banking rather than other higher-cost service platforms, so the banks will not feel as burdened by the higher transaction volume. If existing customers can be shifted toward mobile banking as well, banks may even find savings that allow for different distribution of resources. If banking services are designed with these new customers in mind, banks may be able to solidify relationships with the new customers, expanding the possibility for the banks to provide additional or cross-sold products.

Start-up costs, on the other hand, have the potential to be prohibitively expensive for banks. Not only must mobile banking platforms be built and maintained, but the banks’ processing systems and technologies may also need to be upgraded to increase speed and volume. Outreach to unbanked populations will also be expensive. Building new programs, increasing awareness and education, and outreach efforts have been demonstrably effective in bringing the unbanked into the banking system, but they bring significant price tags with them. Yet several non-banks are already investing in new products and mobile delivery platforms targeting unbanked customers. One of these, Bluebird, is explored here as a case study.

a. Bluebird

American Express offers some card services that function rather effectively as bank accounts. One of these card services is Bluebird, launched in 2012 as a joint project between American Express and Wal-Mart.

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229. See FDIC, supra note 11, at 28. By one estimate, “the average cost of an in-branch transaction is $4.25, whereas the average cost of a mobile transaction is $0.10.” Id.
230. FDIC, supra note 11, at 29.
231. Id.
232. See id. at 28, 36–37.
233. See Choe, supra note 1, at 387.
234. See Kendall et al., supra note 192, at 3.
235. See Baig, supra note 59.
Customers can sign up for Bluebird online or by buying a five-dollar starter kit at any Wal-Mart store.237 Once they have an account, customers can either add funds at a Wal-Mart cash register, by taking a picture of a check on a smartphone, or by arranging for direct deposit of paychecks or government benefits.238 Cash can be withdrawn at ATMs, and bills can be paid online or from the Bluebird app.239 Though some customers will incur minimal fees to withdraw funds at ATMs, there are no fees associated with monthly or annual maintenance, overdrafts, bill pay, inactivity, or card replacement.240 The accounts offer check-writing abilities and “Set Aside” savings pockets, and customer service is available 24/7 from American Express.241

Funds on deposit with Bluebird are protected by FDIC “pass-through” insurance.242 That is, when funds are deposited into a Bluebird account, American Express places the funds into custodial accounts maintained at FDIC-insured banks.243 If one of the custodial banks fails, the funds will be insured; however, they will not necessarily be insured if American Express fails.244

American Express and Wal-Mart are not acting with charitable intent. Wal-Mart has been attempting to enter the financial services industry for some time,245 and the Bluebird card has the benefit of bringing people physically into stores for setup, adding cash, and of course buying goods.246 Consumers also benefit from this “retail footprint that has so many more locations than any bank.”247 However, one limitation of these products is that they can only be used to purchase items at merchants who accept American Express.248

239. See id.
240. See id.
241. See id.
242. See Get a Bluebird Account, supra note 50.
243. See id.
244. See id.
245. See Baradaran, supra note 34, at 169.
246. See Townsend, supra note 237. Wal-Mart same-store sales had been declining in the two years prior to the launch of Bluebird, which became a cited reason to develop the Bluebird product. Id.
2. Durbin Amendment

Bluebird makes its money not from fees charged to customers (because there are hardly any), but by charging interchange fees to merchants.\textsuperscript{249} The Durbin Amendment to the Dodd-Frank Act\textsuperscript{250} and its implementing regulations cap the fees that banks can charge merchants for debit transactions.\textsuperscript{251} Bank revenue fell by about eight billion dollars after these regulations were put in place.\textsuperscript{252}

These interchange-fee caps do not apply, however, to “prepaid cards,” and the Bluebird card is carefully designed so as to fit within the definition of a prepaid card, rather than a debit account.\textsuperscript{253} The result, however, is to put banks at a disadvantage by limiting the fees they can charge merchants rather than customers.\textsuperscript{254} Nevertheless, even with this restriction, banks may be able to price accounts and features so that they are commercially viable but also useful for low-income people.\textsuperscript{255}

B. Public Sector

If the private sector cannot absorb the start-up costs of increasing mobile banking access for the unbanked, it is appropriate for the public sector to provide support.

In the past, the Treasury Department has provided funding for banks to provide services to the unbanked. As part of the First Accounts program, the Treasury Department in 2002 awarded grants to selected institutions to defray outlay expenditures.\textsuperscript{256} Banks could also “receive a tax credit equal to a fixed amount per account opened.”\textsuperscript{257} This governmental support suggests that the banking industry may continue to need additional incentives to expand into unbanked populations; market forces and standard economic incentives may not be enough.\textsuperscript{258}

\begin{footnotesize}
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\item[249.] See Lauren E. Willis, Why Not Privacy by Default?, 29 BERKELEY TECH. L.J. 61, 121 n.245 (2014); Baig, supra note 59.
\item[251.] Id.; 12 C.F.R. § 235.1–10.
\item[252.] See Townsend, supra note 237.
\item[254.] Zywicki, supra note 253, at 1494.
\item[256.] See Barr, supra note 2, at 222–23.
\item[257.] Id. at 224.
\item[258.] See id. at 222–24. Professor Barr’s recommendations for expanding financial inclusion to the unbanked also prominently feature tax credits. See id. at 221.
\end{itemize}
\end{footnotesize}
The Treasury Department may also consider developing a mobile banking platform that banks could license. A centralized platform would provide consistent services and features across all banks. Further, developing one platform for all (or many) institutions to use would be more cost effective than each institution developing its own app.259

Such public expenditures can be put toward building a mobile platform for older-model cell phones as well as an app for smartphones; such a platform and app, once created, can be utilized by multiple banks in interfacing with their customers. This public investment would relieve individual banks from the time and expense of building their own platforms and apps, making it more feasible for banks to offer such programs.260 System maintenance and customer service would also be simplified if many banks used the same programs, thereby benefiting customers because the offered products would look similar from bank to bank.261 The platform and app should be available in a variety of languages, as well, to reach those individuals who utilize alternative financial service providers in part for their linguistic convenience. Startup funds could (and should) also be used for outreach and marketing to potential customers.

IV. DESIGNING PRODUCTS FOR THE UNBANKED

In order to meaningfully increase financial inclusion, the unbanked must be brought into the banking system and, more importantly, must stay there.262 The previous section suggested that private entities might find it more economically feasible to serve the unbanked, but that—even if that were not the case—the importance of financial inclusion is so significant that public funds can and should be expended to increase adoption of mobile banking technology. This section proposes several features that would make bank accounts more appealing and valuable to unbanked people. Many of these features are already recognized in the industry as being important to increasing financial inclusion.263

A. Account Features and Fees

Accounts designed primarily for unbanked people should be transaction accounts rather than savings accounts. While both types of accounts provide

259. See Senthe, supra note 7, at 13–14 (noting that “shared mobile banking venture[s]” are less costly than individual undertakings).
260. See id.
261. See id. Care would have to be taken to ensure that such a government-built product did not run into the same technical difficulties as the Affordable Care Act website debacle of late 2013. See generally Sheryl Gay Stolberg & Michael D. Shear, Inside the Race to Rescue a Health Care Site, and Obama, N.Y. TIMES (Nov. 30, 2013), http://www.nytimes.com/2013/12/01/us/politics/inside-the-race-to-rescue-a-health-site-and-obama.html. More specific recommendations on this point, however, are beyond the scope of this Article.
262. FDIC, supra note 11, at 19 (“The use of financial services outside of the banking system also suggests opportunities to better engage current customers.”).
263. See, e.g., FDIC MODEL SAFE ACCOUNTS TEMPLATE, supra note 255.
safe storage of funds on deposit, transaction accounts provide valuable bill pay services, whereas savings accounts often restrict the number of transactions the customer can execute over a period of time.\footnote{264} Given that the unbanked are unlikely to deposit significant amounts of money, the interest earned on savings accounts is not enough to offset the lost value of transaction services.\footnote{265}

Recalling that unbanked and underbanked customers report feeling tricked by fees designed to punish mistakes, fees charged to customers utilizing these accounts should be up-front fees in set sums, rather than the customer incurring per-transaction or punitive fees after making an error.\footnote{266} Set fees, therefore, are likely to keep would-be customers in bank accounts and curb newly-banked customers away from closing their accounts and leaving the banking system.\footnote{267} For the banks’ protection, overdrafts of these accounts should not be permitted.

Basic transaction services, such as direct deposit and bill pay, should also be provided.\footnote{268} These services ought to be maximized for use via a mobile phone. For example, customers should be able to initiate a bill payment to a new payee via the mobile app—a service that now must be largely initiated via online banking.\footnote{269}

The customer should also be able to set up, manage, and disable alerts from the app (another service largely available only online), and these alerts should be sent promptly.\footnote{270} The app should provide account balance and transaction history in real-time, or as close to real-time as possible.\footnote{271} Remote deposit

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\item \footnote{264}{See U.S. DEPT. OF THE TREASURY, supra note 84, at ix–xi.}
\item \footnote{265}{See Hill, supra note 46, at 92. On the other hand, the Treasury Department’s First Accounts Program saw more savings accounts opened by new customers than transaction accounts. See U.S. DEPT. OF THE TREASURY, supra note 84, at ix. This suggested to the Treasury Department that unsophisticated bank customers are more comfortable with the mechanics of a savings account than a transaction account. See id. at ix–xi. There is little information, however, on whether the accounts opened during that program remained in use or how much money customers deposited into the accounts. [S]avings accounts are often a logical first step for the unbanked given their lower minimum balances and monthly fees and—perhaps most importantly—because they also do not expose account-holders to risk of high overdraft fees from bounced checks. While savings accounts do not provide the convenience of checking accounts for handling routine bill paying, they do protect account-holders from the theft of cash kept on hand and may promote savings. Id. at xi.}
\item \footnote{266}{See, e.g., O’Brien, supra note 32, at 487 (quoting a respondent’s complaint that “Bank of America will charge you five bucks for going . . . to a private ATM machine to check your balance. That’s five bucks. That’s robbery without a gun. If you’re 71 cents overdrawn it’s a $35 fine. Again, that’s robbery without a gun.”) (citations omitted).}
\item \footnote{267}{See id. at 488.}
\item \footnote{268}{See FDIC, supra note 11, at 17–19.}
\item \footnote{269}{See id. at 20–27. As many poor households use mobile phones for primary Internet access, online banking, which requires a laptop or desktop computer, is inaccessible to them. See supra note 109 and accompanying text.}
\item \footnote{270}{See FDIC, supra note 11 at 21–23.}
\item \footnote{271}{See id. at 20–22.}
\end{itemize}}
capture (RDC) should also be enabled for mobile users, so that customers can take a picture of a check with the phone and deposit it via the mobile app.272

Banks should also explore methods by which they can expand their ability to accept cash deposits. WIZZIT, for instance, allows cash deposits to be made at any branch of a partner bank;273 U.S. banks should explore establishing similar partnerships so as to expand the geographic reach of their services. The customer should have the ability to withdraw cash at ATMs with as low a transaction fee as is feasible for the bank.

It may also be beneficial to offer financial education to newly-banked customers. Many previous financial inclusion efforts have included significant educational components, including the First Accounts Program,274 Bank on San Francisco,275 and the Small-Dollar Loan Pilot Program.276 Mobile platforms, especially apps, are excellent opportunities for financial education. A bank account app could include pop-up “did you know?” information, or offer real-time chat with customer service agents. A mobile game could even be developed to help users familiarize themselves with basic financial tools and information.

272. See id. at 23–25.
273. See supra note 145 and accompanying text.
274. U.S. DEPT. OF THE TREASURY, supra note 81, at iii (“A secondary goal was to provide financial education to unbanked individuals.”). Grant money was awarded to participating banks by the Treasury Department, and over 37,000 accounts were opened in the initial two-year period. See id. at iii. Data is scarce, however, on how much money customers put into their accounts and how long these accounts remained open.
275. A consortium of the city and county of San Francisco, the Federal Reserve Bank of San Francisco, a local nonprofit EARN (Earned Assets Resource Network), and fourteen financial institutions worked together to open more than 11,000 accounts in the San Francisco area. See Choe, supra note 1, at 384–85. The Bank on San Francisco marketing strategy, which included an aggressive multimedia campaign with blunt slogans such as “Check Cashing Rips You Off” and “Check Cashing Shrinks Your Paycheck,” was particularly interesting. Id. at 387.
276. The FDIC developed a template through which banks could, theoretically, provide $1,000 and $2,500 loans that were cost-effective to the banks. A Template for Success: The FDIC’s Small-Dollar Loan Pilot Program, 4 FDIC Q., 28, 30 (2010), https://www.fdic.gov/bank/analytical/quarterly/2010_vol4_2/FDIC_Quarterly_Vol4No2_SmallDollar.pdf. Despite the FDIC’s efforts to make a cheerful assessment of the program, see, e.g., id. at 31 (suggesting that “charge-off ratios for SDLs and NSDLs . . . are in line with the industry average”), commentators roundly denounced it. See, e.g., Baradaran, supra note 34, at 174–75 (writing that “[a]t best, banks can be incentivized to meet the poor’s banking needs,” but “[f]orcing banks, whose purpose is to maximize profits, to make loans to the poor will inevitably lead to inadequate loans and disgruntled bankers”); William M. Webster IV, Payday Loan Prohibitions: Protecting Financially Challenged Consumers or Pushing Them over the Edge?, 69 WASH. & LEE L. REV. 1051, 1066–67 (2012) (writing, wryly, that “[i]t should be noted that this small-dollar loan template is called ‘feasible’ rather than ‘profitable’”); Todd J. Zywicki, Consumer Use and Government Regulation of Title Pledge Lending, 22 LOY. CONSUMER L. REV. 425, 428–29 (2010). For another example of financial education, see generally The America Saves Program, CONSUMER FED’N OF AM., www.americasaves.org (last visited Mar. 25, 2016).
277. See FDIC, supra note 8, at 11–12.
B. Opening the Account

The FDIC has suggested, but not analyzed, that opening mobile accounts could increase financial inclusion among the unbanked.\textsuperscript{278} Increasing the utility of an account increases the likelihood of widespread adoption, and convenient account opening would both increase the utility of the account and reduce barriers to opening an account.

A few banks already offer mobile account opening, but expanding this capability could be a major step forward in increasing financial inclusion among the unbanked.\textsuperscript{279} However, the idea of a customer opening an account without presenting herself at a bank poses several problems.\textsuperscript{280} Most obviously, mobile account opening poses customer identification problems, which in turn leads to concerns about money laundering and other account misuse.\textsuperscript{281}

Banks are required to develop customer identification plans, known in the industry as know-your-customer (KYC) or customer due diligence (CDD) requirements.\textsuperscript{282} Financial institutions are required to conduct basic identity checks on customers opening new accounts.\textsuperscript{283} Typically, U.S. customers opening accounts are required to show identification such as a driver’s license before an account can be opened.\textsuperscript{284} These basic, initial identity checks serve to reduce money laundering and other misuse of accounts by ensuring that accounts are not opened by known criminals or under fictitious names.\textsuperscript{285}

Such KYC requirements may, however, also serve as the first barrier to entry for the unbanked.\textsuperscript{286} Flexibility, nevertheless, is possible: the KYC regulations require only “risk-based procedures for verifying the identity of each customer to the extent reasonable and practicable[,]” specifically, the customer’s name,

\textsuperscript{278} See id. at 63.
\textsuperscript{279} See FDIC, supra note 11, at 17.
\textsuperscript{280} See id. at 18–19 (listing problems, which include compliance with Bank Secrecy Act requirements, providing assurance to those who are uncomfortable inputting their information into a potentially insecure device, and developing user-friendly interfaces for reaching those customers who are not tech savvy).
\textsuperscript{283} See 31 C.F.R. § 1020.220(a)(2).
\textsuperscript{285} Banks’ recordkeeping and reporting of suspicious transactions are other important sentinels in the fight against money laundering and terrorist financing. See Christopher, supra note 281, at 6–8.
\textsuperscript{286} See FDIC, supra note 11, at 28–29. Tension regarding how stringent financial regulation should be has long existed. Regulations should “be tight enough to protect users and discourage money laundering, but open enough to allow new services to emerge.” Senthe, supra note 7, at 25 (internal citation omitted).
date of birth, address, and an identification number.\textsuperscript{287} Thus, KYC requirements can be satisfied by means other than a driver’s license. More identification options will likely increase the number of customers who can open bank accounts. The Bank on San Francisco project, for instance, required banks to accept Mexican and Guatemalan consular IDs as the new customers’ primary ID,\textsuperscript{288} and under the program as a whole, 11,000 new bank accounts were opened.\textsuperscript{289}

The Financial Action Task Force, an intergovernmental policy-making organization, recommends that countries adopt a risk-based approach in designing KYC requirements.\textsuperscript{290} A risk-based approach means that customers and accounts that pose high risk of criminal activity should be subjected to higher scrutiny by the financial institution;\textsuperscript{291} the flip side of this is that accounts and customers who pose low risk may be less closely scrutinized.\textsuperscript{292}

Importantly, FATF suggests that low-balance accounts can be opened with minimal KYC regulations.\textsuperscript{293} Because currently unbanked individuals in America are disproportionately poor, the accounts they would open would be primarily low-balance. These potential banking customers, then, could be permitted to open certain accounts with minimal identification procedures. The accounts could have a maximum balance cap to prevent abuse—a sum large enough to be useful for daily living but not high enough to tempt money launderers.\textsuperscript{294} Perhaps a cap at $2,500 or $5,000 would ensure the accounts remained at this lower risk threshold, as would a limit on the number or size of transactions that can be made.

Customers may be able to identify themselves to banks by taking and submitting photos of driver’s licenses or other government IDs taken on the cell phone’s camera.\textsuperscript{295} Cell phones also provide unique features that can help banks identify users, such as the ability to determine a phone’s location—tracking the phone’s location may assist in curtailing suspicious activity.\textsuperscript{296} Identification requirements could also be relaxed if the account owners arranged to have paychecks or government benefit payments directly deposited into the account.

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\item \textsuperscript{287} 31 C.F.R. § 1020.220(a)(2). For “a U.S. person,” that means a taxpayer identification number, and for “a non-U.S. person,” a taxpayer identification number, passport number, alien identification card number, or other government-issued identity card. \textit{Id.}
\item \textsuperscript{288} See Choe, supra note 1, at 385–86.
\item \textsuperscript{289} See id. at 387.
\item \textsuperscript{290} FINANCIAL ACTION TASK FORCE, GUIDANCE FOR A RISK-BASED APPROACH: PREPAID CARDS, MOBILE PAYMENTS, AND INTERNET-BASED PAYMENT SERVICES 26–27 (2013).
\item \textsuperscript{291} See id. at 27.
\item \textsuperscript{292} See id.
\item \textsuperscript{293} See id. at 28–29.
\item \textsuperscript{294} See, e.g., \textit{Get a Bluebird Account}, supra note 50 (describing the limits Bluebird places on the amount of funds that can be added to an account and spent).
\item \textsuperscript{295} FDIC, supra note 11, at 18–19.
\item \textsuperscript{296} See id. at 19.
\end{itemize}
KYC concerns are not the only barrier preventing wider availability of mobile account opening. As mentioned above, slow processing systems within the bank’s infrastructure may also pose difficulties “optimizing the mobile browsing experience for account opening.” Mobile phone screens may also be insufficient to display the various account-opening disclosures required.

C. Security Concerns

Many people, banked and unbanked, avoid mobile banking out of security concerns. However, industry reports argue that mobile applications have the potential to be more secure than online applications for at least three reasons. First, some vendors are developing features that can use a mobile device’s camera to scan photographs of documents and automatically insert needed information into the application. The photograph also helps banks assess the authenticity of the documents used. Second, by using the location-tracking capabilities of mobile devices, banks can identify an applicant’s actual location, which helps prevent fraud. Third, banks can use biometric authentication—including facial, voice, and fingerprint recognition—to enhance security.

V. Conclusion

Simply opening a bank account will not solve a poor person’s economic problems. However, increasing financial inclusion throughout the United States is necessary for the economic stability of all Americans. Mobile phones can be a new and important entry point for bringing the unbanked into the regulated financial system. Such mobile access may be economically feasible for the banks, but if not, the social value is such that mobile access should be subsidized and incentivized by the government. Statutes and regulations should be revised to increase financial inclusion via mobile banking. In particular, KYC requirements should be reduced for small accounts, and deposited funds from trusted sources should be made immediately available to account holders.

297. Id. at 18.
298. See id.
299. See id. at 29, 36 (noting that “security risks of this emerging delivery channel are less understood”).
300. Id. at 29–30 (footnotes omitted).
301. See Barr, supra note 2, at 140 (noting that “[a]ccount ownership in and of itself is no panacea”).
302. See supra note 42 and accompanying text.
303. See Barr, supra note 2, at 180, 211 (arguing that government incentives are necessary to lower the start-up costs to the banks for implementing low-cost accounts for the unbanked, who are likely to become banked if given access to such options).