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The 2015 Survey of Consumer Payment Choice: Summary Results

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Abstract:
The 2015 Survey of Consumer Payment Choice (SCPC) was implemented using a new longitudinal panel, the Understanding America Study (UAS), and results are not yet comparable to the 2008–2014 SCPC. In 2015, U.S. consumers made 68.9 payments per month. Debit cards remained the most popular payment instrument among U.S. consumers in 2015, accounting for 32.5 percent of their monthly payments, followed by cash (27.1 percent) and credit or charge cards (21.3 percent). For nonbills, consumers used cash and debit equally—about one-third of the time for each. For bills, consumers used payment cards for half of bill payments and electronic payments from bank accounts for one-quarter of bill payments. In 2015, U.S. consumers on average held $202 in cash (on person and stored on property, large values excluded). Use of new payment technologies was still relatively rare. Just over 1 percent of consumers had a Venmo account in 2015. About half a percent of U.S. consumers held bitcoin or other virtual currencies.

Keywords: cash, checks, checking accounts, debit cards, credit cards, prepaid cards, electronic payments, payment preferences, unbanked, Survey of Consumer Payment Choice

JEL Classifications: D12, D14, E42

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This report, which may be revised, is available on the web site of the Federal Reserve Bank of Boston at http://www.bostonfed.org/economic/rdr/index.htm. It is also available, together with additional information about the SCPC, including former years' surveys, at http://www.bostonfed.org/economic/cprc/SCPC.

Acknowledgments appear on the first page of this report. The authors are responsible for any errors that may remain.

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CPRC CONSUMER PAYMENTS Research Center

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I. Introduction

The 2015 Survey of Consumer Payment Choice (SCPC) is the eighth in a series of annual studies conducted by the Federal Reserve Bank of Boston to gain a comprehensive understanding of the cash and noncash payment behavior of U.S. consumers.[1] This report contains 51 tables with detailed estimates of consumers' payment choices. The report also contains estimates of consumer activity related to banking, cash management, and other payment practices; consumer assessments of payment characteristics; and a rich set of consumer and household demographic characteristics. For more details about definitions and motivations, please consult earlier papers describing the SCPC surveys, especially Schuh and Stavins (2014).

Due to changes in sampling frame and sample size, this paper describes the survey results for 2015 only. From 2008 to 2014, SCPC results were based on the RAND Corporation American Life Panel (ALP).[2] In 2015, the SCPC was implemented using the Understanding America Study (UAS) panel, managed by the University of Southern California (USC) Dornsife Center for Economic and Social Research (CESR). Both panels are intended to be representative panels of U.S. consumers, but there are important differences in the design of the two panels that suggest the UAS may be more representative; thus, the sampling frame of the 2015 SCPC is not exactly comparable to that of 2008–2014. In addition, the sample size of the 2015 SCPC is notably smaller. A total of 1,429 respondents completed the 2015 SCPC, all members of the UAS.[3] The Consumer Payments Research Center (CPRC) plans to release a full time-series of the SCPC, beginning in 2008 and encompassing both the RAND and USC datasets.[4] Pending those statistical computations, however, data users should not attempt to discern any trends by comparing the 2015 USC survey results to prior years' RAND results.

[1] For detailed reports on earlier versions of the SCPC, see Foster et al. (2009, 2011), Foster, Schuh, and Zhang (2013), Schuh and Stavins (2014, 2015), and Greene, Schuh, and Stavins (2016).

[2] In 2014, the SCPC was administered to members of the ALP and the UAS. The UAS respondents were not included in the 2014 official results to maintain the longitudinal panel from prior years.

[3] In addition to the UAS respondents, 504 respondents were surveyed via the market research firm GfK. These respondents are not included in the official SCPC sample or results, pending further analysis; see Section VII. "Survey Methodology and Data."

[4] Future research will compare and contrast the demographic composition, payments assessments, and behaviors in the ALP and UAS datasets, in a manner analogous to the analysis of 2012 SCPC subsample data reported in Hitczenko (2015), as it is important to discern whether SCPC survey responses differ between the two samples and, if so, why they are different.

The results of the 2015 SCPC reflect modest modifications in the questionnaire and other aspects of survey methodology, introduced to improve the overall quality and measurement of consumer payment choices. Some changes complement and lay the groundwork for data collected by the Diary of Consumer Payment Choice (DCPC).[5] The 2015 SCPC is the first version of the SCPC to ask consumers to report account balances of checking account(s) and the total limit on all their credit cards. Also in 2015, questions were added to probe consumers' reasons for not adopting some payment instruments and methods. Questionnaire changes are described in detail in Section VII.

The SCPC in combination with the DCPC may provide useful data for the Federal Reserve's strategic focus for financial services during the next decade (Federal Reserve System 2017a and 2017b). Together, the SCPC and DCPC provide data on U.S. consumers' experience with and perceptions of payment instrument security and speed as well as with other aspects of consumer satisfaction, for example, cost and convenience. The SCPC asks consumers to rate payment instrument security and to report their experience of identity theft and/or lost or stolen payment cards and cash. It provides data on consumers' understanding and use of virtual currency, which could inform strategic initiatives related to faster payment methods. In addition, analysis of consumers' payment behavior by cohort may help policymakers envision how any future changes in the payment market might affect the welfare of different demographic groups.[6]

The remainder of this paper comprises three parts: 1) a written summary of the key SCPC results; 2) a set of tables containing most of the official SCPC results (SCPC Tables); and 3) a set of tables containing the official definitions of important survey concepts (Definition Tables).

[5] For more description of the Diary of Consumer Payment Choice, see Briglevics and Shy (2012), Shy (2013), Briglevics and Schuh (2014), Shy (2014), Shy and Stavins (2014), Schuh (forthcoming), and Greene, O'Brien, and Schuh (forthcoming).

[6] Connolly and Stavins (2015) compares the adoption and use of payment instruments by demographic groups and finds that young, black, low-income, and low-education consumers tend to rely more heavily on cash than other consumers. Consumers with the lowest income have a very different pattern of payment behavior than higher-income consumers. They are less likely to hold checks, cards, or electronic payments, and they use cash more intensively than other consumers.

More details are available in a separate technical appendix by Angrisani, Foster, and Hitczenko (2017).

A. Official SCPC tables and data

As in prior years, the SCPC aims to measure U.S. consumer ownership (adoption) of payment instruments and the use of these instruments (number of payments) on a monthly basis. The official 2015 survey results appear in SCPC Tables 1–41 of this paper (a total of 51 tables). The tables are organized into seven sections:

1. *Adoption of accounts and payment instruments* – Consumer adoption of bank accounts, nonbank payment accounts, and payment instruments and practices. **[SCPC Tables 1–15]**
2. *Liquid assets and asset management* – Cash holdings, cash withdrawals, checking account balances, and virtual currency holdings. **[SCPC Tables 16–20]**
3. *Incidence of use of accounts and payments instruments* – Share of consumers using their adopted accounts and payment instruments to pay bills, purchase goods and services, and make other payments. **[SCPC Tables 21–27]**
4. *Frequency of use of payment instruments* – Number and share of payments by type of transaction. **[SCPC Tables 28a–34]**
5. *Loss, theft, or fraud* – Percentage of consumers experiencing loss, theft, or fraud, by payment instrument. **[SCPC Table 35]**
6. *Assessments* – Consumer assessments of key characteristics of payment instruments and payment practices. **[SCPC Tables 36a–37b]**
7. *Household Characteristics* – Information about consumer demographic characteristics and financial status. **[SCPC Tables 38–41]**

The official definitions of survey concepts are found in Definition Tables 1–7.

All SCPC data are available free of charge to the public once the official results have been published, along with complete technical documentation.[7] The SCPC tables contain most, but

[7] See http://www.bostonfed.org/economic/cprc/data-resources.htm

not all, of the results from the 2015 survey. The 2015 SCPC public-use microdata set contains the consumer-level SCPC responses to all of the survey questions, including those used to create the official tables. A complete set of tables containing estimates of the standard errors for the SCPC results is available online.[8] A complete list of variables in the 2015 SCPC datasets can be obtained from the questionnaire.[9]

For more details about the measurement approach and content of the SCPC, see Schuh and Stavins (2014 and 2015) and earlier data releases. All SCPC data users are strongly encouraged to read the technical appendix (Angrisani, Foster, and Hitczenko 2017) for more information on the data. The SCPC estimates reported here may be revised in the future as a result of additional process improvement and insights from new data. Small discrepancies in the estimates may exist throughout the paper, due to rounding.

II. Account adoption: money and credit

U.S. consumers fund payments with the money and credit available to them. Therefore, taking stock of the dollar value of different types of money and credit held by consumers is a prerequisite to understanding consumer payment choices. In most cases, consumers' money and credit are stored in accounts managed by depository institutions (banks) and other financial institutions, so it is important to track consumer ownership of these accounts.[10]

The SCPC tracks ownership of the following components of money: currency (notes, bills, and coins); traveler's checks; checking deposits; and savings deposits.[11] Consumers also fund some of their payments with credit accounts that contain balances, known as credit limits, from which consumers can make payments directly. Three types of credit accounts are reported in the SCPC: credit card accounts, charge card accounts, and mobile phone accounts (limited to use for

[8] To obtain the standard error tables, see http://www.bostonfed.org/economic/cprc/SCPC/index.htm
[9] To obtain the 2015 SCPC dataset and questionnaire, see http://www.bostonfed.org/economic/cprc/SCPC/index.htm
[10] For details about the components of money, see Greene, Schuh, and Stavins (2016).
[11] The SCPC does not collect data on special-purpose savings accounts (for example, Christmas Clubs).

financing SMS/text message payments, these last accounts would not have an associated credit limit).

The SCPC measures consumer adoption of money, credit, and payment instruments in two ways. First, it asks whether consumers have or own the accounts and/or instruments; that is, whether consumers have adopted them. Adoption is a necessary prerequisite to consumers' use of accounts and instruments; hence, measuring adoption is a prerequisite to measuring both the share of consumers using an instrument or account and the frequency with which consumers use it. Second, the SCPC collects data on the dollar value of some of the accounts or instruments owned: cash holdings, checking accounts, and total credit card limits. Dollar values also are collected for virtual currency holdings (not reported, due to the small share of consumers owning virtual currency).

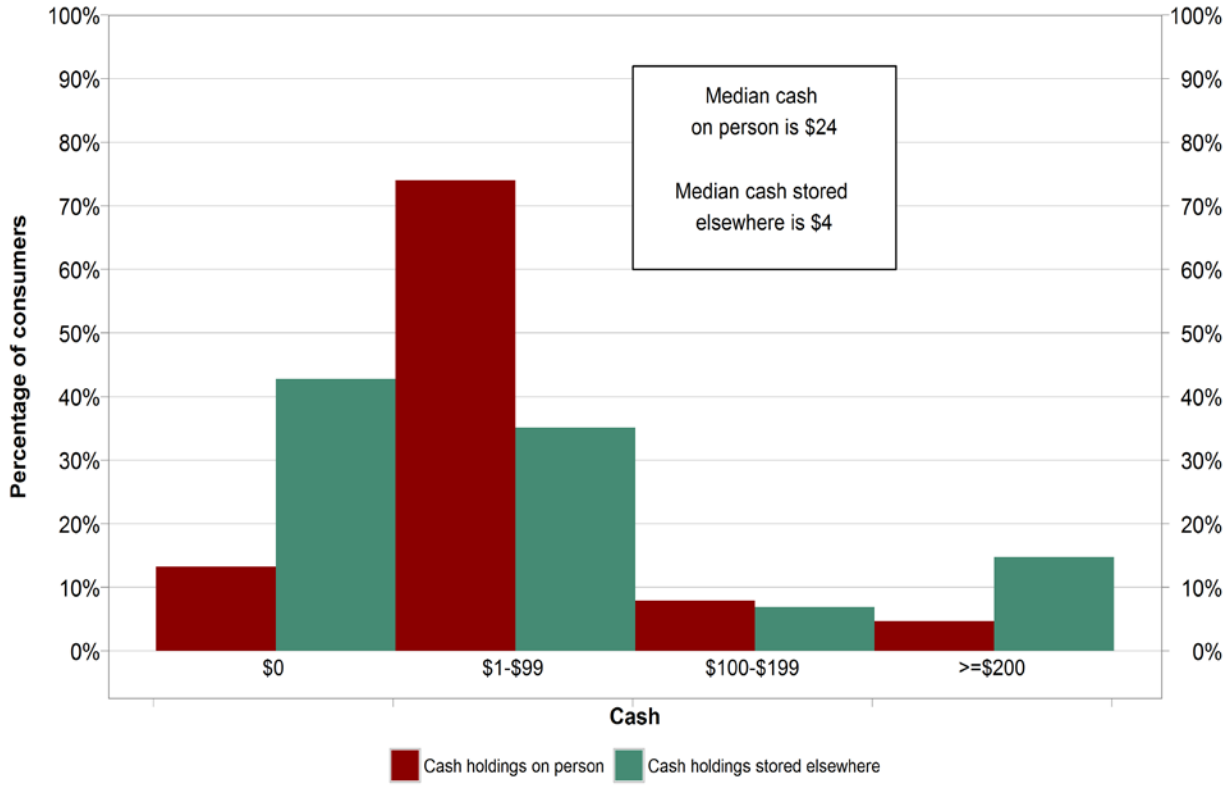
A. Cash

In the year ended October 2015, essentially all U.S. consumers reported having adopted cash (99.7 percent) (SCPC Table 7). The SCPC defines adopting cash as having used cash at least once in the past 12 months and/or having some cash on one's person (pocket, purse, or wallet) or on one's property (home, car, or office). For the purpose of this discussion, we treat cash held by consumers as a type of account to be adopted, in which value is stored.

In October 2015, 90 percent of U.S. consumers had some cash either on their person (pocket, purse, or wallet) or elsewhere (authors' calculation). In 2015, U.S. consumers' average total cash holdings (on person plus on property) were $202 (SCPC Table 16).[12] Cash holdings vary quite a bit among consumers. For purposes of this discussion, large-value holdings (the largest 2 percent reported) are omitted throughout because their sample size is too small to be estimated precisely year-to-year; see SCPC Table 16 for quantities, including large-value holdings. The

[12] This estimate excludes the top 2 percent of cash holdings (roughly $2,500 or more), due to small sample sizes and high year-to-year volatility of large-value observations. This exclusion is motivated by the fact that the SCPC obtains only a very small number of observations of very large cash holdings each year; hence, fluctuations in the composition of large-value cash holdings exert statistically excessive influence on estimates of the average value of total cash holdings. The 98th percentiles are $500 for cash in pocket, purse, or wallet and $2,000 for cash stored elsewhere. See the technical appendix for more information.

average [median] amount in pocket, purse, or wallet was $66 [$24]. The average [median] amount stored elsewhere was $137 [$4] (Figure 1 and SCPC Table 17).



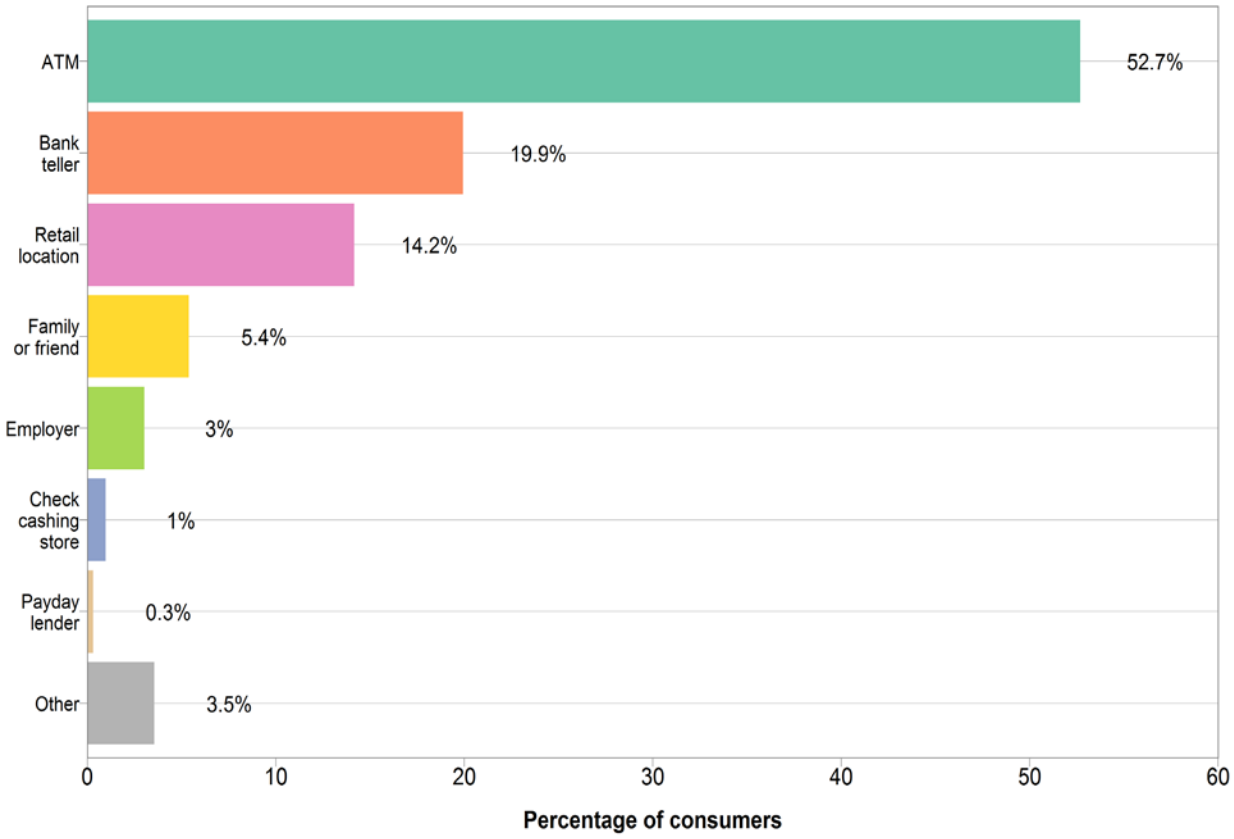
Source: 2015 Survey of Consumer Payment Choice, Table 16. *Note:* For all cash measures, large values (defined as greater than the 98th percentile of all observations) are omitted.

Figure 1: Distribution of cash holdings on person and stored elsewhere

Two-thirds of U.S. consumers had total cash holdings of less than $100. For holdings stored elsewhere, 12 percent had more than $500 stored elsewhere.[13] For consumers who stored cash elsewhere, the 2015 SCPC included experimental questions to probe their reasons for storing cash. The results of this experiment indicate that consumers were likely to allocate a higher share of their cash to a reserve for planned, medium-term spending and unforeseen emergencies than to long-term savings.

[13] Authors' calculation. As noted above, for all reported cash measures, large values (defined as greater than the 98th percentile of all observations) are omitted.

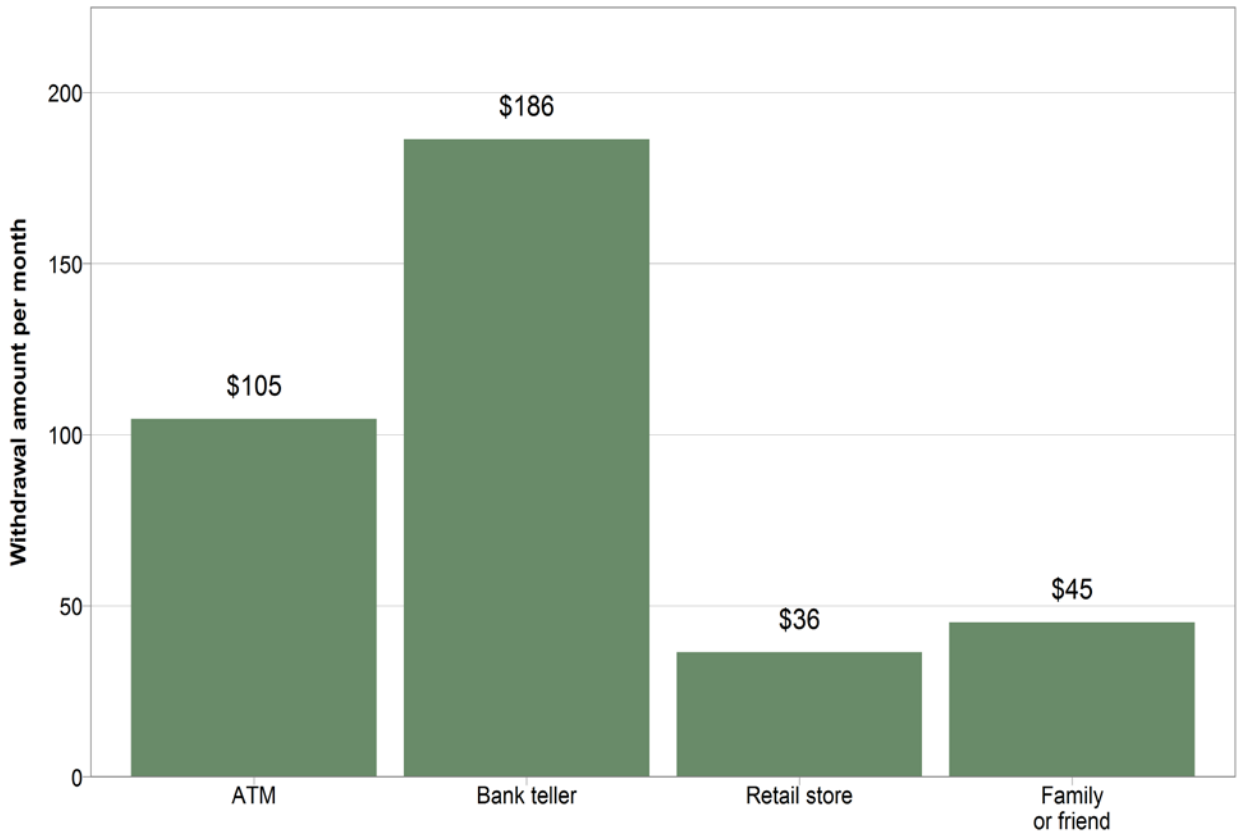
In 2015, the average amount per cash withdrawal was $115 (SCPC Table 18). More than half of U.S. consumers used an ATM most often for withdrawals; one-fifth used a bank teller (Figure 2 and SCPC Table 19). The average amount per withdrawal was highest at a bank teller ($186), followed by ATM ($105), family or friend ($45), and retail store ($36) (Figure 3 and SCPC Table 18).[14]



Source: 2015 Survey of Consumer Payment Choice, Table 19.

Figure 2: Location of most frequent cash withdrawals and average amount per withdrawal

[14] The number of cash withdrawals by consumers per month is not reported here, due to some thus far unexplained anomalies in responses for 2015. A substantial share of consumers reported a surprisingly large number of cash withdrawals in 2015. Preliminary analysis of 2016 SCPC data indicates that this outcome may have been a one-time event.



Source: 2015 Survey of Consumer Payment Choice, Table 18.

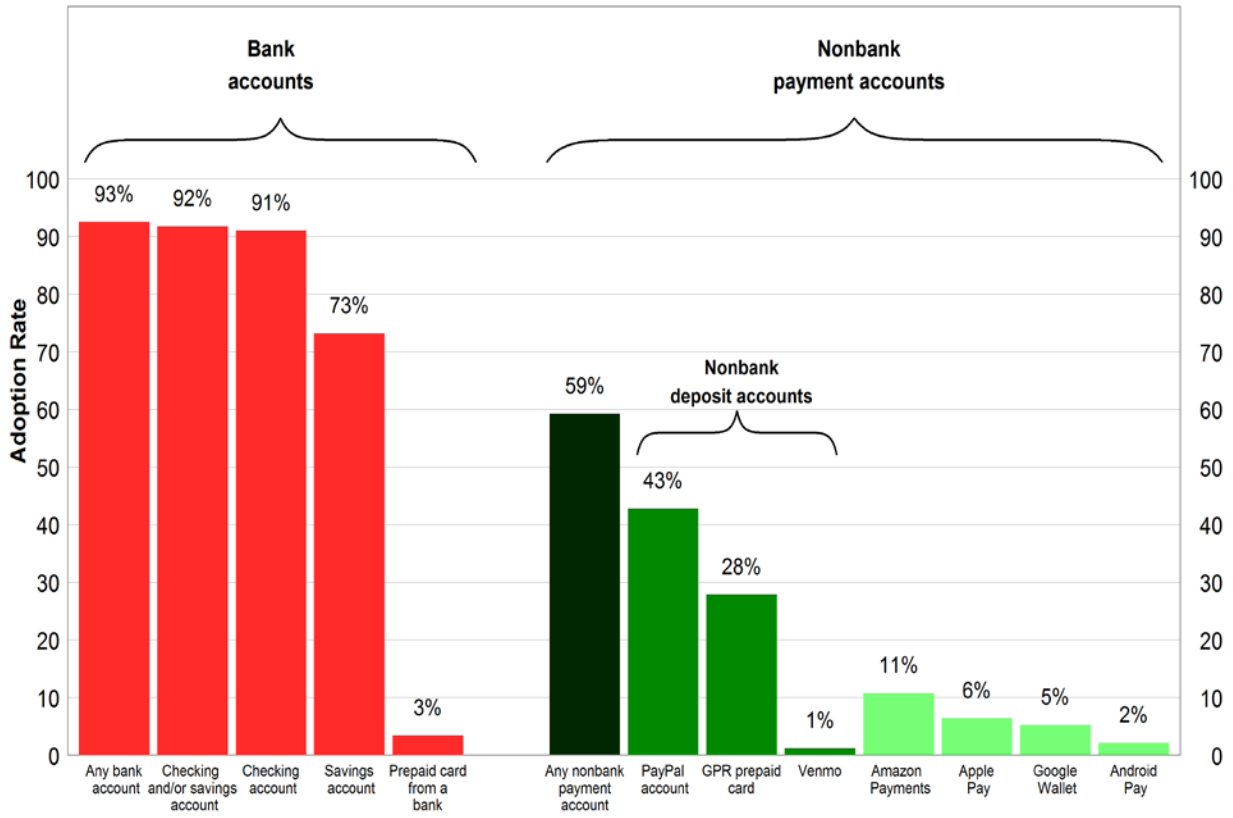
Figure 3: Location of most frequent cash withdrawals and average amount per withdrawal at most frequent location

B. Bank and nonbank accounts

Information about consumers' account ownership and the value of balances in those accounts provide context for payment instrument choice. Just as consumers must have adequate cash on hand to make a cash payment, consumers must have adequate funds in a deposit account to use a debit card (or any other instrument tied to an account, that is, check, OBBP, or BANP) without overdrawing. Questions about checking deposits and credit limits were new in 2015. Consequently, the 2015 SCPC offers an expanded picture of consumers' liquidity.[15] In 2015, the percentage of individual U.S. consumers with a deposit account (checking or savings) at a bank was 91.8 percent (SCPC Table 1). This result aligns with other data sources. The Survey of

[15] Account balances for other types of money (for example, money market fund balances, savings deposits), credit (for example, student loans, home equity lines of credit), and payment instruments (GPR prepaid cards) would be needed to obtain a comprehensive picture of consumers' liquidity available for making payments.

Consumer Finances found that 93.2 percent of U.S. households had a transaction account (defined to include checking, savings, money market, and call accounts) in 2013 (Bricker et al. 2014); the FDIC reported that 93.0 percent of households had a checking or savings account in 2015 (Burhouse et al. 2016).

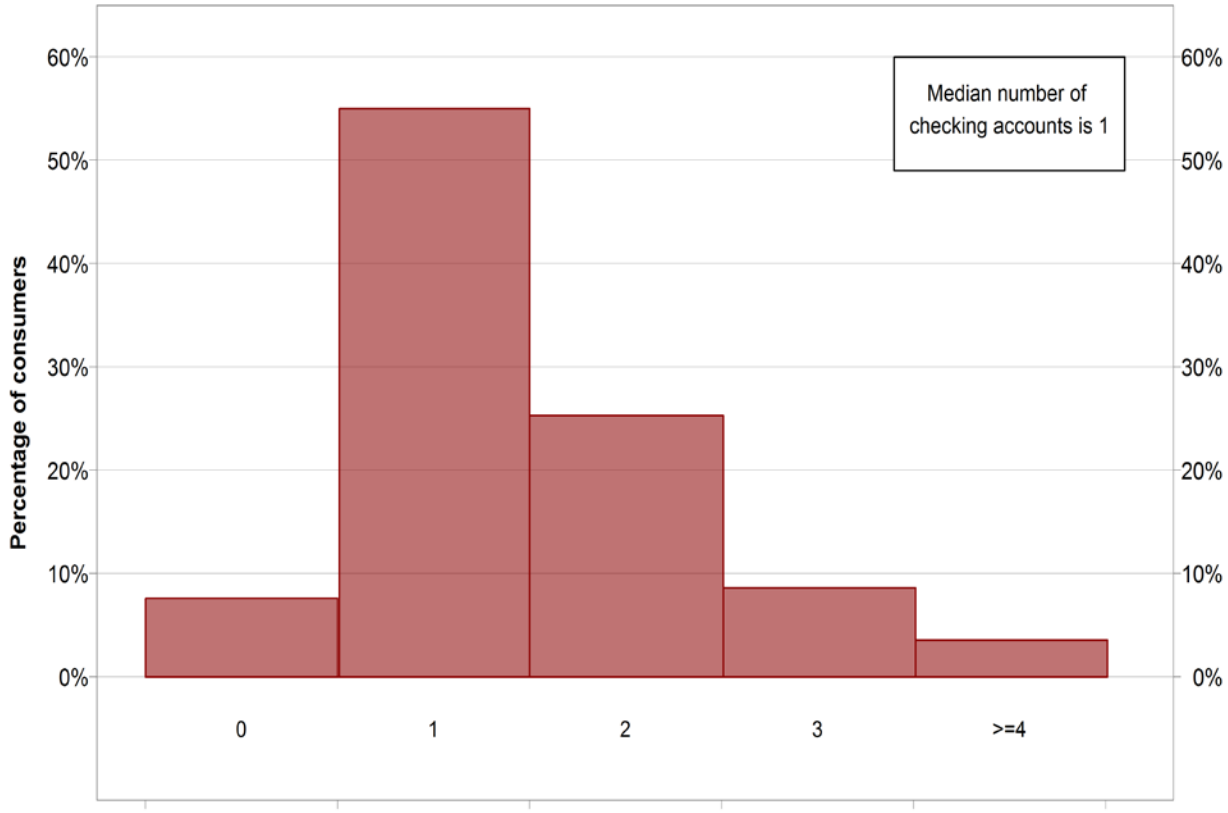


Source: 2015 Survey of Consumer Payment Choice, Table 1, Table 4, Table 12.

Figure 4: Consumer adoption of bank and other payment accounts, 2015

In 2015, consumer adoption of checking accounts was 91.1 percent (Figure 4 and SCPC Table 1). Two in five U.S. consumers had more than one account (Figure 5). Almost half (45.5 percent) of U.S. consumers had a primary account that was jointly held. Of joint accounts, the vast majority were held with a spouse or partner, more than 90 percent. Survey questions about joint ownership were new in 2015. Six in 10 checking account adopters (62.4 percent) reported earning no interest on their primary checking account (SCPC Table 1); 62.9 percent of

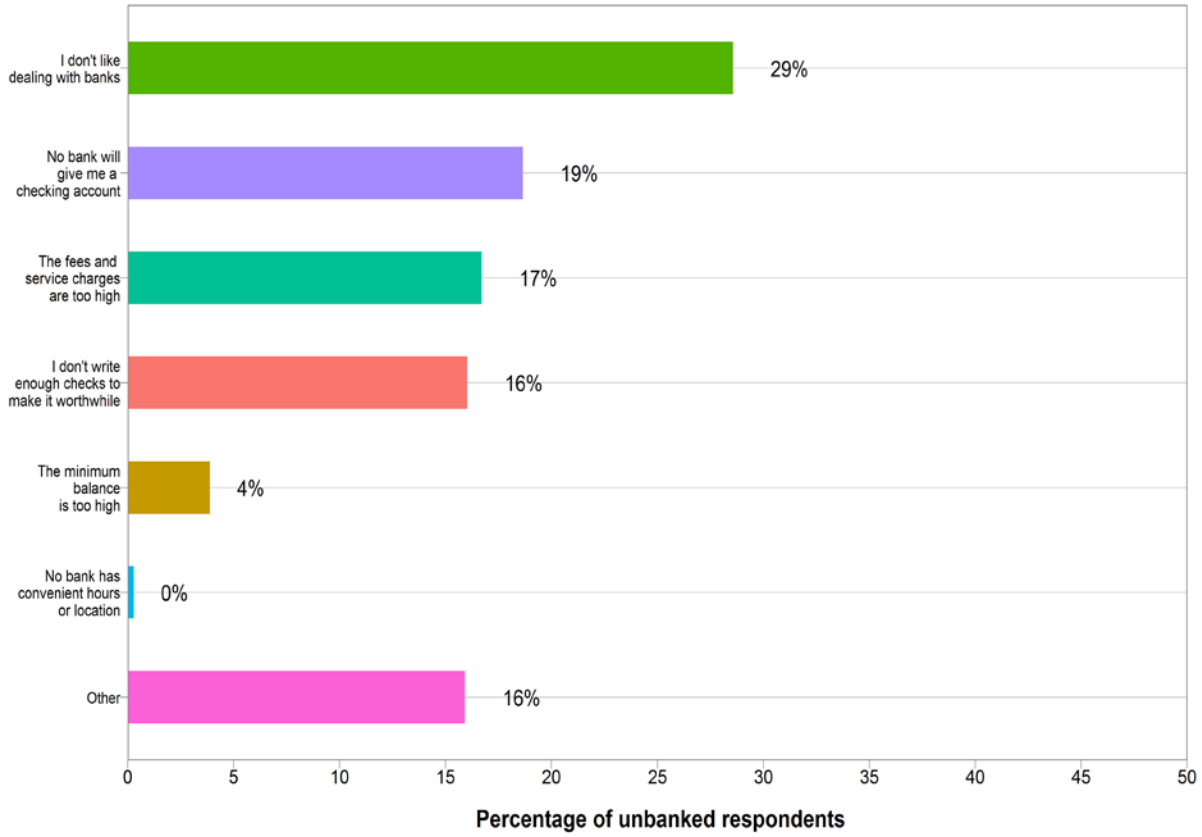
consumers had overdraft protection. About three-quarters of consumers (73.3 percent) had linked checking and savings accounts (SCPC Table 1).



Source: 2015 Survey of Consumer Payment Choice.

Figure 5: Distribution of number of checking accounts

Asked the primary reason they did not have a checking account, 37 percent of consumers without checking accounts cited reasons related to cost (fees and services charges are too high; not writing enough checks to make having an account worthwhile; required minimum balance too high); 29 percent said they "don't like dealing with banks"; and 19 percent said "no bank will give me a checking account" (Figure 6 and SCPC Table 14a). For a report on the payment practices of the unbanked, see Cole and Greene (2016).



Source: 2015 Survey of Consumer Payment Choice, Table 14a.

Figure 6: Reasons for not adopting a checking account

Almost three-quarters of U.S. consumers had one or more savings accounts (73.3 percent, SCPC Table 1). Almost 40 percent of consumers adopted one savings account; 35 percent adopted two or more. Three-quarters of account adopters (76.9 percent) reported earning interest on a savings account (SCPC Table 6).

Like checking and savings accounts, some payment services provided by non-depository institutions enable consumers to store money, to send and receive money online, and to make payments for purchases and bills. Examples include PayPal and Venmo as well as GPR prepaid cards. In 2015, 60 percent of U.S. consumers adopted nonbank deposit accounts that can be used to make payments, including both GPR prepaid cards and accounts that can be accessed via a payment card (credit, debit, or prepaid) linked to the account or via BANP (Figure 4, SCPC Tables 4 and 12). By far the most popular general-purpose nonbank payment account is PayPal, adopted by 43 percent of U.S. consumers.

As noted above, consumers use general-purpose reloadable (GPR) prepaid cards as an alternative to bank accounts. That is, these consumers can receive income, pay bills, and make cash withdrawals using these cards (Greene and Shy 2015) (SCPC Table 12), which have a network logo and can be used anywhere.[16] The SCPC defines GPR prepaid cards as capable of these bank-account-like functions. In 2015, 29.1 percent of consumers owned at least one GPR prepaid card. Asked the primary reason they did not have a GPR prepaid card, six in 10 consumers without GPR prepaid cards (59.8 percent) said they did not need one: "My current payment methods meet all my needs" (SCPC Table 14b).

Beginning in 2009, consumers could also hold virtual currency, such as bitcoin. Virtual currency is not government backed and exists only in digital form. The SCPC questionnaire defines virtual currency as follows: "These payment methods exist online and are different from U.S. dollars ($), the euro (€), or other official foreign currencies. They are sometimes called cryptocurrencies." In 2015, two in five consumers reported that they had heard of some virtual currency (SCPC Table 8). Less than 1 percent of consumers owned bitcoin. Asked the primary reason they did not own virtual currency, 52 percent of nonadopters said their current payment methods met all their needs and 29 percent said they did not understand the technology (SCPC Table 14b).[17]

C. Credit accounts

In 2015, three-quarters of U.S. consumers had credit accounts used to make payments, consisting of either charge cards or credit cards. Charge cards are expected to be paid in full each month. Some American Express cards and store-specific cards, for example, are charge cards; 5 percent of consumers had charge cards in 2015 (SCPC Table 7).[18]

[16] The SCPC measure of GPR prepaid cards consists of the percentage of consumers who reported adopting any of the following: Direct Express, other government benefits card, payroll card, "other general purpose prepaid card that has a logo from Visa, MasterCard, Discover or American Express," and a list of branded GPR prepaid cards (Table 12).

[17] To gain understanding of the payment choices of the small share of U.S. consumers who own virtual currencies, the SCPC was administered to a sample of 105 virtual currency owners in 2015, via Qualtrics. A report on the preferences and behaviors of those respondents is forthcoming (Schuh and Shy forthcoming).

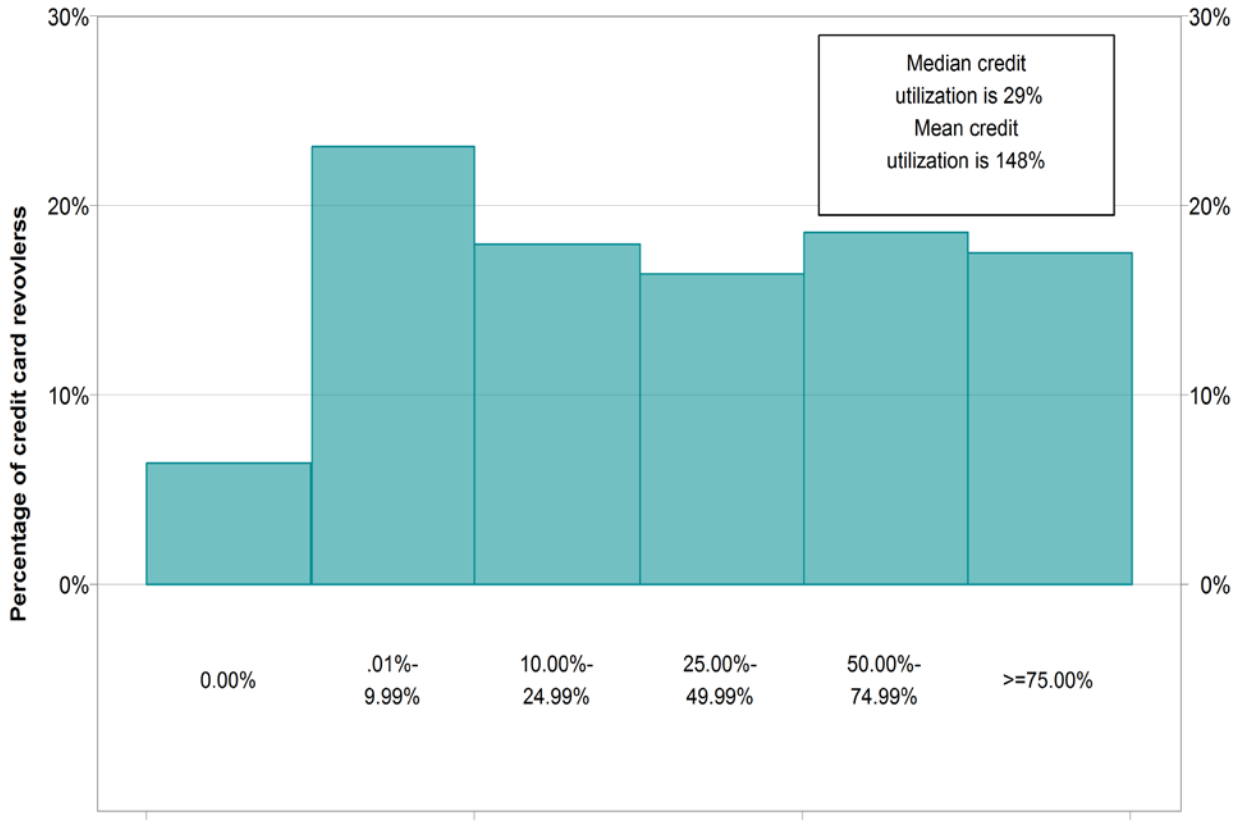
[18] Another charge expected to be paid in full each month is a text/SMS message payment.

Credit cards differ from charge cards in that consumers are expected to pay some minimum amount each month and then may choose whether or not to maintain a balance ("revolve" credit card debt) on which they pay interest. Borrowers who carry a balance are called revolvers. Three-quarters of consumers had credit cards. At some point during the 12 months ending in October 2015, 45 percent of consumers carried over an unpaid balance on a prior month's credit card bill (59 percent of credit card adopters) (SCPC Table 41), that is, they did not pay the balance in full at the monthly due date. The mean credit card balance carried over from the prior month (not including current charges) for all credit card adopters was $2,840, for revolvers only, the mean was $4,816. Note that this estimate of carried-over balances of revolvers differs from the total balances reported by credit bureaus, which are a snapshot as of a particular date and include both carried balances and new charges, some share of which will be repaid at the next payment date.[19]

For credit card adopters, the mean credit limit was about $20,000, and the median credit limit was about $10,000. Among revolvers, median credit utilization (that is, the debt carried over from prior months as a percentage of the credit limit) was 29 percent in October 2015 (Figure 7). Using Equifax data, Fulford and Schuh (2015) estimate that credit utilization was just over 30 percent for credit card adopters overall for the entire period from 2000 to 2014.[20] As Figure 7 shows, credit utilization by revolvers is widely dispersed, with 30 percent of credit card revolvers using less than 10 percent of their credit limit and 36 percent using more than half of their credit limit.

[19] For a discussion of credit bureau and consumer survey data, see Brown et al. (2015).

[20] Note that the Equifax measure of utilization differs from the SCPC's in that it includes amounts incurred during the current month.



Source: 2015 Survey of Consumer Payment Choice. *Note:* Includes credit revolvers only.

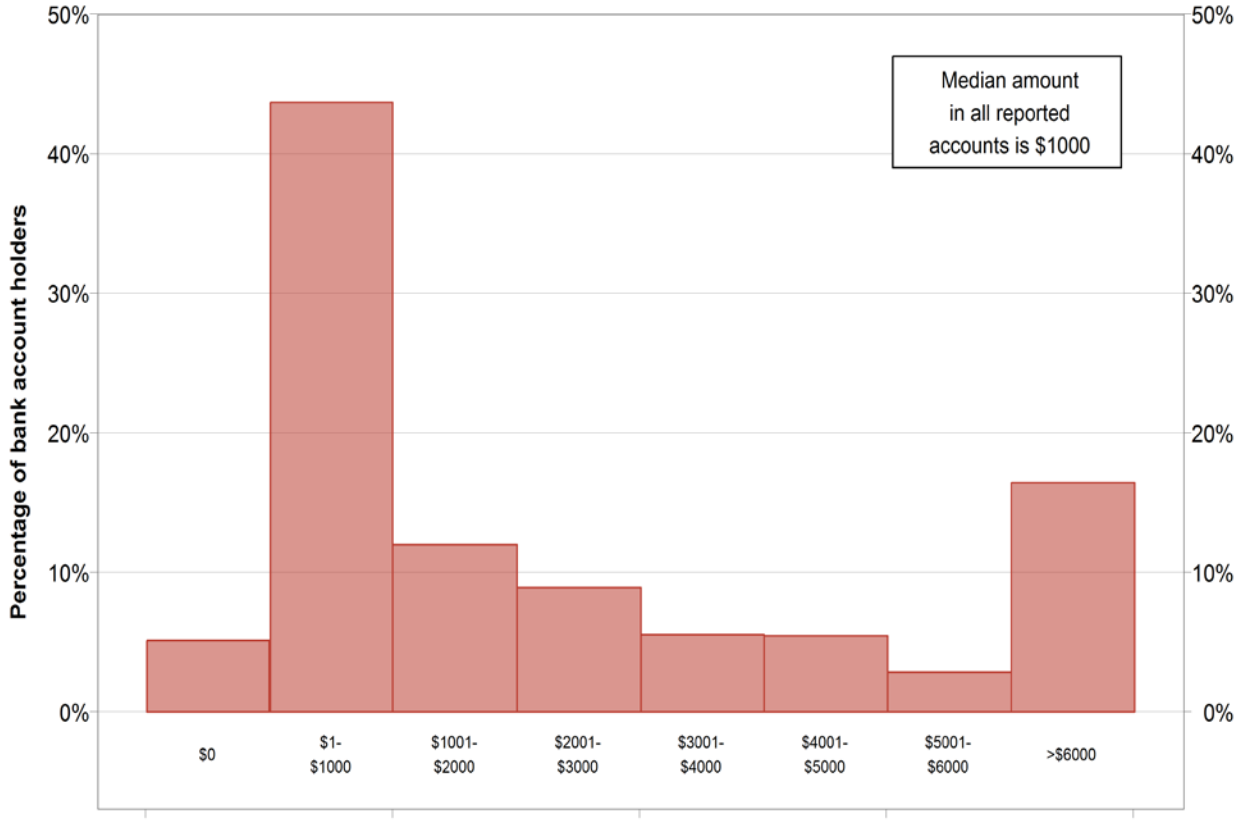
Figure 7: Distribution of credit utilization

Asked the primary reason they did not have a credit card, half of consumers without a credit card cited reasons related to keeping debt under control ("I only want to spend money that I have." "I don't want to go into debt."); 20 percent cited reasons related to cost (too costly, don't want to pay interest, interest rates too high); and 9 percent said they applied for a credit card but were not approved (SCPC Table 14b).

C. Account balances

Account balances are an important factor in payment instrument choice (Briglevics and Schuh 2014 find this in research on cash balances). Without available funds or credit in an account, consumers are less likely to use the payment instrument(s) linked to that account. In 2015, the SCPC collected account balances (that is, dollar values) for three types of money (U.S. currency,

primary and secondary checking account deposits, and virtual currency) and for the credit limits and outstanding debt on all credit and charge cards.



Source: 2015 Survey of Consumer Payment Choice, Table 16. *Note:* For consumers with two or more accounts, the sum of balances of the primary and secondary accounts. For consumers with one account, the account balance. Consumers with no account are omitted.

Figure 8: Checking account holdings of checking account adopters, 2015

Consumers hold more funds in checking accounts than in cash. In October 2015, U.S. consumers' average total checking account holdings (defined for each consumer as the sum of the balance in the primary checking account[21] and the balance in the secondary checking account, if relevant) was $6,007 [median $675] (Table 1 and SCPC Table 16).[22] As noted above, average cash holdings were $202. Half of checking account adopters have $1,000 or less in their checking accounts (Figure 8). Twenty percent of checking account adopters have less than $100.

[21]Defined in the SCPC as the account the respondent uses "most often, not necessarily the account with the most money in it."

[22] Among consumers with a checking account, average total holdings were $6,792. Balances were not requested for third and additional accounts.

Among adopters of checking accounts, the average balance in U.S. consumers' primary checking account was $4,561 [median $699], in the secondary checking account, $5,687 [median $784].

	Average balance per consumer	Median balance per consumer	Share of consumers with $0 balance
Cash	$202	$52	10%
Checking account balances	$6,007	$675	17.2%

Source: 2015 Survey of Consumer Payment Choice, Table 16 and authors' calculations. *Note:* For consumers with two or more checking accounts, balances are calculated as the sum of the primary account balance and the secondary account balance. Consumers with no checking account are included in the calculation. Too few consumers report holdings of virtual currency to make balances relevant.

Table 1: U.S. consumers' liquid asset balances available for making payments, October 2015

D. Account access technology

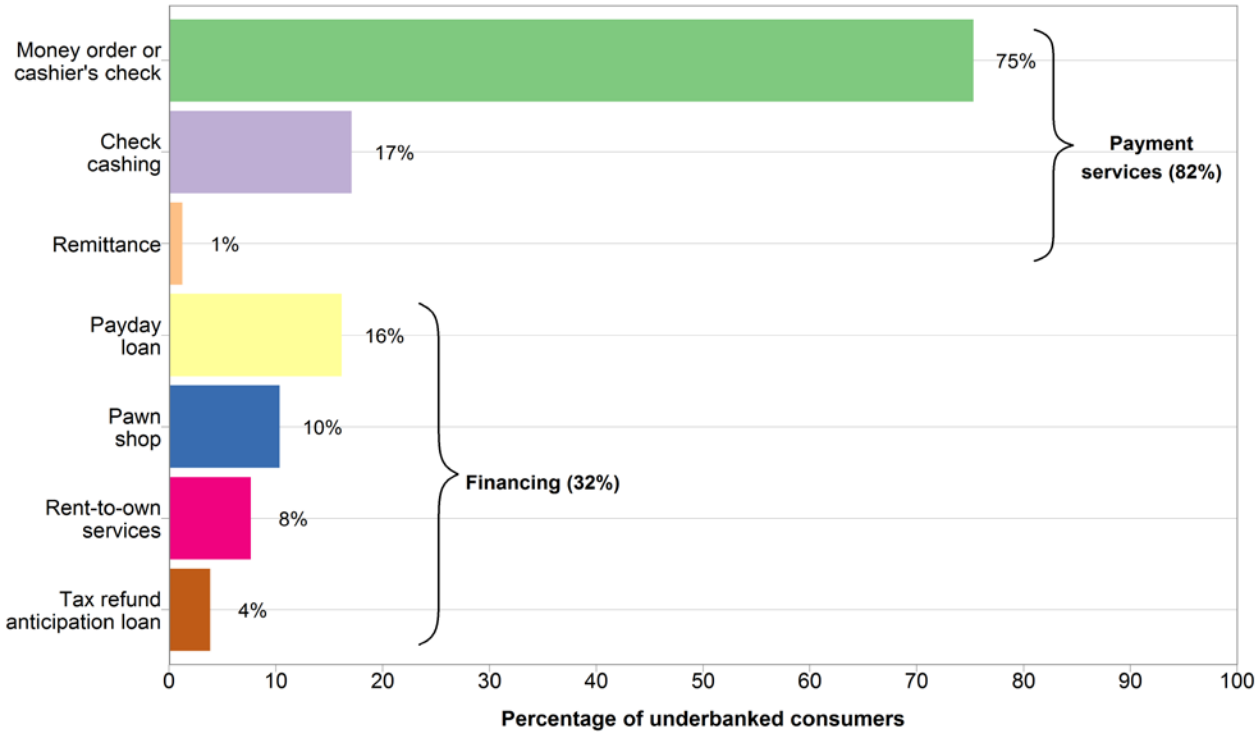
Some accounts and technologies allow consumers to store funds for payments and to receive payments, for example, PayPal and Venmo. Others are mobile apps linked to specific-purpose prepaid cards with funds stored on them, for example, those of Starbucks and Dunkin Donuts. Some apps do not store value and instead act as pass-throughs to existing accounts or cards (debit, credit, or prepaid), for example, Apple Pay, Android Pay, and Google Wallet. These newer technologies often connect to traditional payment instruments, in particular, BANP and cards. Almost two-thirds of U.S. consumers reported having adopted an account or app that would enable them to make a payment using a mobile phone. Sixty-four percent had an app like iTunes, Facebook Messenger, Apple Pay, or Android Pay (SCPC Table 4) (note that the iTunes payment function is limited and that Facebook Messenger is not primarily a payments technology). Because a traditional payment instrument usually underlies transactions facilitated by apps and because the use of newer payment technologies remains relatively rare, SCPC respondents report payment instrument use (discussed below) in terms of the underlying payment instrument. For example, the SCPC estimate of the number of online payments made with a credit card would include not only payments made directly with a credit card but also payments made using Apple Pay linked to a credit card.

E. Alternative financial services

Use of alternative financial services (AFS), that is, purchasing any of four payment services from a nonbank in the past 12 months (money order, cashier's checks, check cashing, and remittances) or any financing from a nonbank (payday loans, loan at a pawn shop, rent-to-own services, or tax refund anticipation loan), is used as an indicator by the FDIC to identify U.S. households that are underbanked.[23] Following the FDIC, the SCPC defines underbanked consumers as those who have a bank account and who have used one or more of these AFS. In 2015, the SCPC found that 24.2 percent of U.S. consumers (that is, individuals 18 and older) were underbanked based on the FDIC definition, compared with the FDIC finding of 19.9 percent *of U.S. households* in 2015.[24] Two-thirds of underbanked consumers used only payments services; one in five used only financing (one or more types). The most commonly used category of AFS was money order or cashier's check, used by three-quarters of underbanked consumers (Figure 9 and SCPC Table 21).

[23] Section 7 of the Federal Deposit Insurance Reform Conforming Amendments Act of 2005 requires the FDIC to conduct ongoing surveys of banks' efforts to serve the unbanked and to provide insights into the size of the unbanked and underbanked markets. The 2015 SCPC questionnaire omitted one financial product included in the FDIC definition: auto-title loans. According to the 2013 FDIC survey, auto-title loans contributed 0.3 percent to the results.

[24] This difference is outside the margin of error of the SCPC estimate. The standard error for the SCPC estimate is 1.6 percent, for a 95 percent confidence interval from 21.0 percent to 27.5 percent.



Source: 2015 Survey of Consumer Payment Choice, Table 21. *Note:* Multiple responses permitted.

Figure 9: Percentage of underbanked consumers using alternative financial services, by type of services used

III. Payment instrument adoption and annual use

U.S. consumers access money and credit by authorizing the transfer of funds to a recipient, using a linked payment instrument, as depicted in Table 2.[25] The SCPC covers 13 types of payment instruments:

- Three instruments that are money (U.S. paper currency [no coins], virtual currency [for example, bitcoin], traveler's checks),
- Seven instruments linked to money in deposit accounts held directly by the consumer or by others (paper checks, debit cards, OBBP, BANP, direct deductions from income, money orders, prepaid cards)
- Three instruments linked to credit (credit cards, charge cards, and text/SMS payments[26]).

[25] Tobin (2008) defines payment instruments as "derivative media," that is, distinct from the asset (or liability, for example, an increase in credit card debt) used to fund the payment.

Money and credit	Payment instruments
Money	
Currency	U.S. currency Foreign currency Virtual currency (for example, bitcoin)
Traveler's check	Traveler's check (or prepaid traveler's card)
Transactions deposits	
Checking accounts in consumer's name (demand and other checkable deposits)	Checks (personal, certified, or cashier's) Debit card OBBP BANP Money order (bank-issued) Prepaid card (bank-issued)
Checking accounts held in name of payments service provider or servicing financial institution (may have pass-through deposit insurance)	Money order (issued by nonbank) Prepaid cards (issued by nonbank) Nonbank payment app (for example, PayPal, Venmo)
Checking accounts held in name of employer	Direct deduction from income
"Nontransaction" deposits in consumer's name (with check-writing and/or electronic payment features)	Checks OBBP BANP
Credit	
Revolving credit	Credit card
Nonrevolving credit	Charge card Text/SMS (credit extended by nonbank)

Source: Authors' analysis. *Note:* Foreign currency and cashier's checks are not tracked by the SCPC.

Table 2: Relationship of payment instruments to money and credit

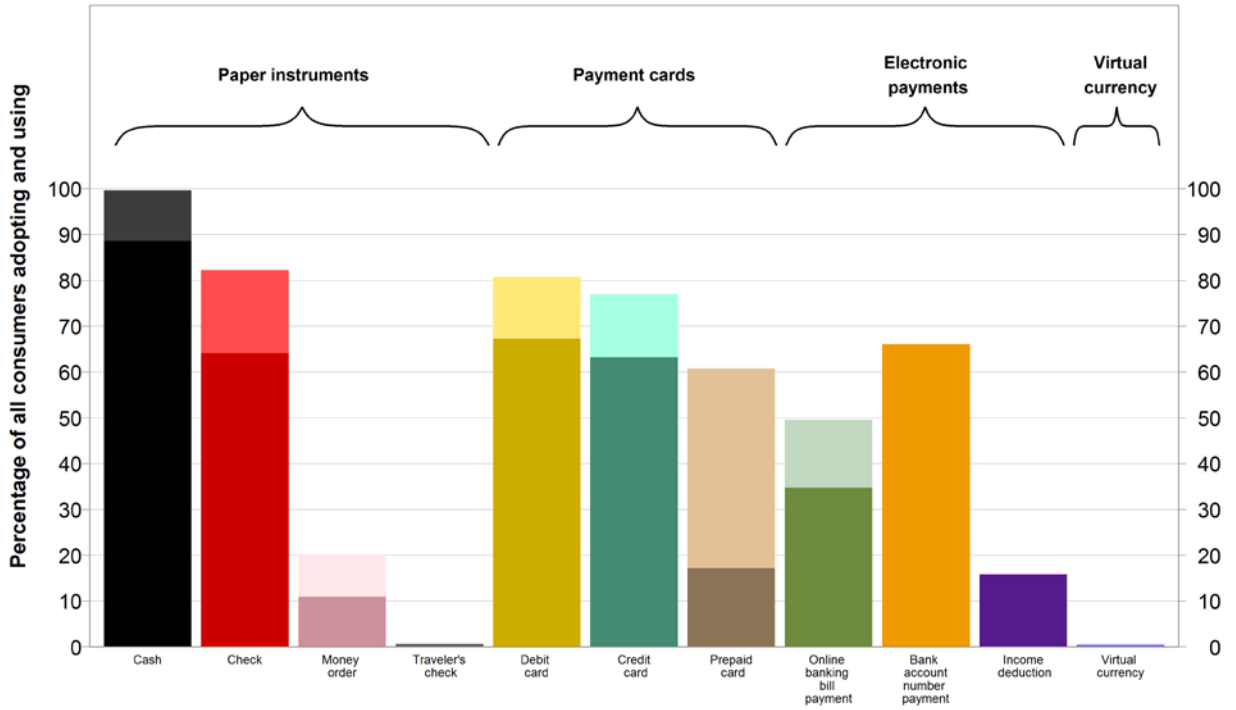
A. Adoption

This section discusses the adoption—or ownership—of these payment instruments by consumers in 2015. It reports 2015 estimates in three ways: 1) adoption rates of individual payment instruments, 2) average number of payment instruments adopted by consumers, and 3) portfolios of payment instruments adopted by individual consumers. Four of the payment instruments are paper media: U.S. currency (notes and bills only, no coins), traveler's checks, money orders, and paper checks (personal, certified, and cashier's). Three are payment cards (debit, credit [including charge cards], and prepaid). Three are electronic: online banking bill

[26] To make a text/SMS payment, mobile phone users send a text message or SMS to authorize the cellular company to make a payment on their behalf. The consumer is expected to repay this amount in full at the next billing due date.

payment (OBBP), bank account number payments (BANP), and virtual (private) currency (for example, bitcoin). The SCPC also reports use of direct deduction from income, for example, automatic payments for health insurance or transfers to a flexible spending account. While not, strictly speaking, a payment instrument adopted by a consumer, this is a method consumers may use to authorize payments in cases where the payment transaction is executed by an employer on the consumers' behalf from the employer's bank account.

In 2015, the top four payment instruments were adopted by more than 80 percent of U.S. consumers: 99.7 percent of U.S. consumers had cash, 82.2 percent had paper checks, 80.8 percent had a debit card, and 76.9 percent had a credit or charge card. In addition, two-thirds had adopted BANP, six in 10 had adopted prepaid cards, and half had adopted OBBP (Figure 10 [entire bars] and SCPC Table 8). Checking account adopters without debit cards (12.0 percent of checking account adopters) said they didn't need one. Seven in 10 of those without debit cards said that they would rather use a credit card or that other payment methods met all their needs (SCPC Table 14b). As noted above, most consumers without a credit card cited reasons related to keeping debt under control.



Source: 2015 Survey of Consumer Payment Choice, Tables 8 and 23a. Note: Lighter bars show percentage of consumers who adopted the payment instrument. Dark bars show percentage of consumers who used the payment instrument at least once in the year ending October 30, 2015.

Figure 10: Percentage of consumers adopting and using payment instrument in the year ending October 30, 2015

B. Annual use of payment instruments, nonbank payment accounts, and account access technology

Most people who have adopted a payment instrument use it at least once over the course of a year. The percentage of adopters using cash, credit cards, debit cards, and checks at least once hovered between 79 and 89 percent for the 12 months ending in October 2015 (Figure 10 [darker bars show percentage of consumers] and SCPC Table 23b [percentage of adopters]). The share of consumers who use OBBP is notably lower than the share of consumers that have adopted OBBP; about three-quarters of OBBP adopters used it. Less than one-third of adopters used a prepaid card. This low percentage could be a signal that some U.S. consumers use prepaid cards quite intensively and others not at all.

About two-thirds of adopters used PayPal to make a payment in the preceding 12 months (SCPC Table 21). As noted above, payments from nonbank payment accounts often are funded using traditional payment instruments. PayPal account adopters reported the various payment instruments they used to fund PayPal payments in the 12 months ended in October 2015. Funding a PayPal payment with BANP (38.4 percent) and credit card (36.1 percent) were the most popular methods. About a third of those who made PayPal payments reported using multiple methods to fund them (authors' calculations, not shown in SCPC tables).

For the 12 months ending in October 2015, one-quarter of consumers made at least one mobile payment (SCPC Table 4). For more on consumers and mobile financial services, see Federal Reserve Board (2016).

C. Portfolios of payment instruments

Of nine payment instruments (cash, paper check, money order, traveler's check, credit card [including charge cards], debit card, prepaid card, OBBP, and BANP), the average U.S. consumer held 5.4 types of payment instruments in 2015 (SCPC Table 15, Figure 11).[27]

In 2015, the most common number of unique types of payment instruments held by U.S. consumers was six, held by about 30 percent of consumers. About three-quarters of consumers held between five and seven unique types of payment instruments. While more than half of consumers (56 percent) had six or more payment instruments, the mix of instruments that consumers held was quite varied. For the 2015 SCPC, 1,429 respondents reported 112 unique portfolios of types of payment instruments. The most common portfolio of seven instruments (two paper, three cards, two electronic; see Table 3) was held by only 16.8 percent of all consumers. The top five portfolios account for less than 44 percent of consumers.

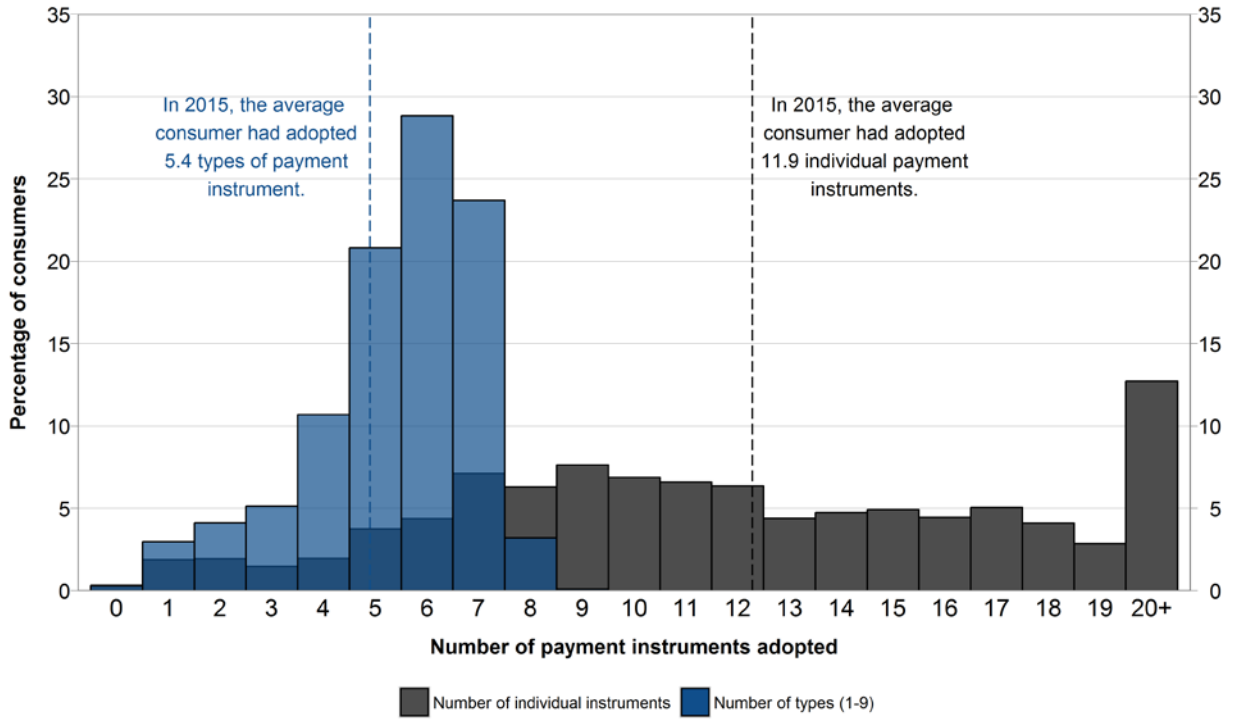
[27] Virtual currency and direct deduction from income are excluded from this analysis.

Number of payment instruments	Cash	Check	Traveler's check	Money order	Credit card	Debit card	Prepaid card	OBBP	BANP	Percentage of consumers
7	x	x			x	x	x	x	x	16.8
6	x	x			x	x		x	x	8.3
6	x	x			x	x	x		x	8.3
5	x	x			x	x			x	6.0
6	x	x			x	x	x		x	3.9

Source: 2015 Survey of Consumer Payment Choice, authors' calculation.

Table 3: Five most common portfolios of payment instrument types adopted by U.S. consumers, 2015

Because U.S. consumers may have multiple checking accounts (with associated checks and debit cards) and multiple credit or prepaid cards, they may carry many more individual payment instruments than unique types of payment instruments. For example, a consumer who holds six credit cards would have one type of payment instrument—credit card—and six individual payment instruments. In 2015, the average consumer had adopted 11.9 individual payment instruments (Figure 11). The number of individual payment instruments adopted is much more dispersed than the number of types, of course, with about 4.2 percent of consumers adopting two or fewer individual payment instruments and 12.7 percent adopting 20 or more individual payment instruments.



Source: 2015 Survey of Consumer Payment Choice.

Figure 11: Number of payment instrument types adopted by individual consumers, 2015

V. Number of consumer payments in 2015

In 2015, U.S. consumers made 68.9 payments per month, on average, per person. The number of consumer payments is a relatively uncommon measure that is not comparable to estimates of the dollar value of consumer spending. In particular, the units used to measure consumer payments (numbers) in the SCPC differ from the units (real dollars) in the economic measure of real (inflation-adjusted) consumption in the National Income and Product Accounts (NIPA), perhaps the most common measure of consumer spending.[28] This section reports U.S. consumers' use of payment instruments in 2015 according to 1) number and share of payments

[28] The two measures differ in at least three conceptually substantive ways: 1) the types of spending included (the number of payments includes consumption plus other consumer spending, such as mortgage payments, person-to-person payments, and payments associated with buying assets); 2) the units of measurement of spending (the number of consumer payments measures how many times a consumer pays for something, not the number of things a consumer buys or the inflation-adjusted dollar value of those purchases); and 3) the population of consumers covered (the SCPC includes only consumers in the noninstitutional population age 18 and above, rather than all consumers, and it may not accurately reflect all household spending). For an extended discussion on the relationship between the number of payments and consumption, see Foster, Schuh, and Zhang (2013) and Schuh (forthcoming).

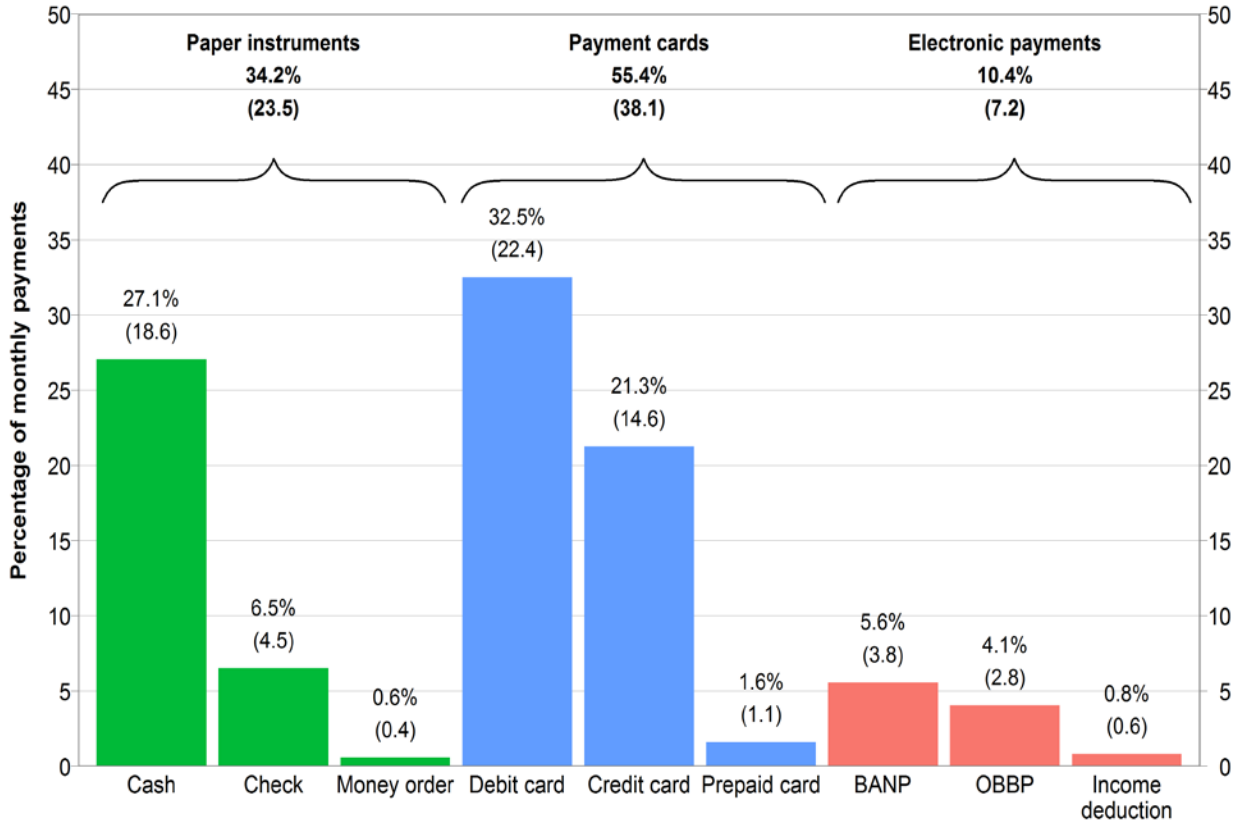
by source of funding (cash, other forms of money, and credit); 2) number and share of payments by payment instrument; 3) number and share of payments by transaction type (bills, nonbills, online, in person, etc.).

The SCPC identifies the number of payments made by U.S. consumers from each funding source, broadly categorized as money (cash, demand deposits, and other payment accounts with underlying demand deposits [prepaid cards, money orders]) and credit (credit and charge cards) (SCPC Table 28).[29] In 2015, payments funded by money accounted for three-quarters of all payments; payments funded by credit accounted for about one payment in five (some payments are not classified, SCPC Table 28b). Of payments funded by money, just over one-third were made with cash and slightly less than two-thirds by payment instruments linked to demand deposits (checks, debit cards, BANP, OBBP, and payment accounts [for example, PayPal] linked to underlying demand deposits).

Debit cards were the most popular payment instrument among U.S. consumers, accounting for 32.5 percent of their monthly payments, followed by cash (27.1 percent) and credit or charge cards (21.3 percent). In 2015, U.S. consumers made an average of 38.1 payments per month using payment cards (55.4 percent of total payments), 23.5 payments per month using paper instruments (34.2 percent), and 7.2 payments per month via electronic and other methods (10.4 percent) (Figure 12). Electronic and other methods include an average of 0.6 payments per month made automatically via direct deduction from income (0.8 percent). As noted above, the number of payments made using nonbank accounts and account access technologies is not reported separately.[30]

[29] Credit also includes text message payments. The number of text message payments is small and is not tracked in the 2015 SCPC.

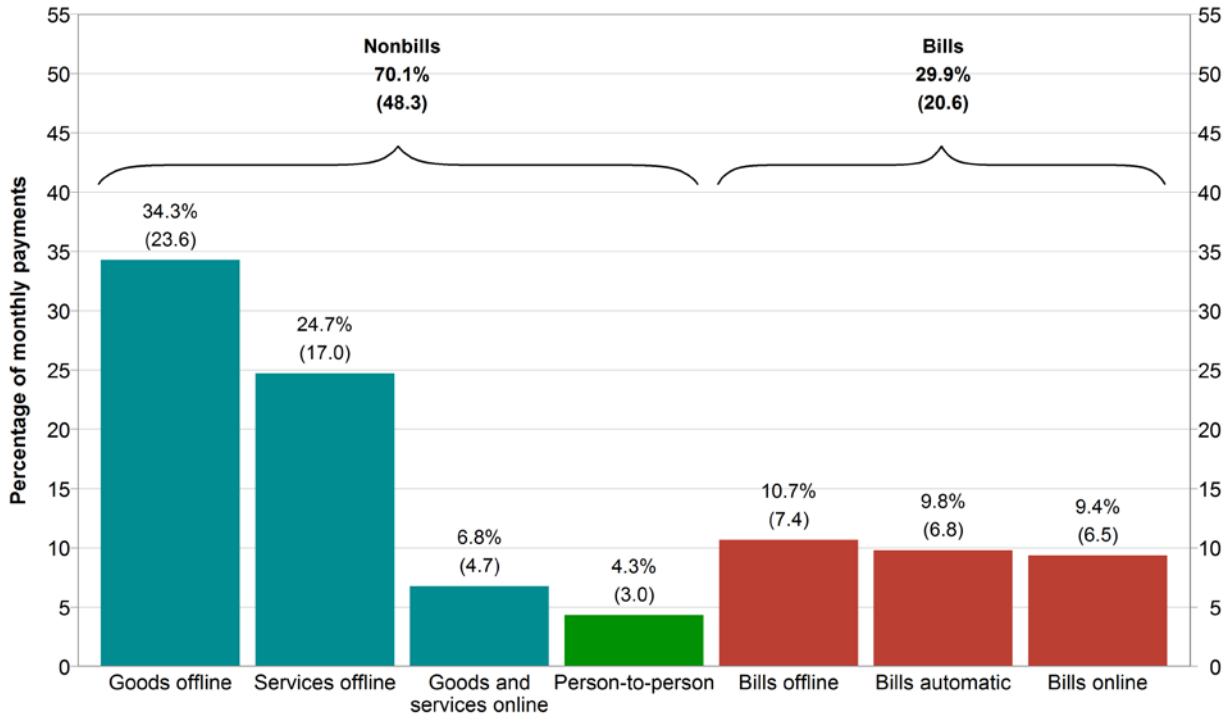
[30] The Diary of Consumer Payment Choice gathers data on both the payment instrument used and the access technology used.



Source: 2015 Survey of Consumer Payment Choice, Table 29. *Note:* Number of payments in parentheses.

Figure 12: Percentage share and number of consumer payments in a typical month, by type of payment instrument, 2015

The SCPC also tracks the number of payments made by U.S. consumers according to seven transaction types, broadly categorized as four types of nonbills (paid online for retail goods or services, paid in person for retail goods, paid in person for retail services, and paid to another person) and three types of bills (two types paid electronically [automatic and online payments] and paid in in person, by mail, or by phone). In 2015, there were 48.3 nonbill payments (70.1 percent of payments) and 20.6 bill payments (29.9 percent) per person per month on average (Figure 13 and SCPC Table 30).



Source: 2015 Survey of Consumer Payment Choice, Table 30. *Note:* Number of payments in parentheses.

Figure 13: Percentage share and number of consumer payments in a typical month, by transaction type, 2015

Nonbill payments include purchases of retail goods and services as well as person-to-person payments. In 2015, offline payments (meaning in person, by mail, or by phone) for retail goods purchases represented the largest share of all payments, with 23.6 payments per month on average, per consumer (34.3 percent), followed by offline payments for services, with 17.0 payments per month (24.7 percent) (Figure 13 and SCPC Table 30). There were 4.7 online payments for goods and services (6.8 percent); and 3.0 person-to-person payments (4.3 percent). For nonbills, consumers used cash and debit equally—about one-third of the time for each—and credit for about one in five nonbill payments (authors' calculations based on SCPC Tables 30 and 31).

Bill payments (about 30 percent of all payments by number), include automatic bill payments (made by direct deduction for income, electronically from a bank account, or using a payment card); online bill payments; and bill payments made in person, by mail, or by phone. Bills paid

electronically (automatically or online) were two-thirds of bill payments:[31] 6.8 automatic bill payments per consumer, on average (9.8 percent of all payments) and 6.5 online bill payments (9.4 percent of all payments) (SCPC Table 30, Figure 13). There were 7.4 bill payments by mail, in person, or by phone (10.7 percent of all payments). U.S. consumers used payment cards (debit, credit, and prepaid) for half of bill payments and electronic payments from bank accounts (BANP and OBBP) for just over one-quarter of bill payments (authors' calculations based on SCPC Table 30 and 31).

VI. Comparing the SCPC to external data sources

Comparing the SCPC data to consumer data from external sources presents new opportunities to understand consumers' survey responses and payments behavior. Previous reports have compared the SCPC data to the Federal Reserve Payments Study (FRPS), the Survey of Consumer Finances, and data from NACHA, the electronic payments association, for validation and benchmarking.

In 2015, comparison with external data was expanded by modifying the SCPC to ask consumers for permission to match their survey responses to credit report data from Equifax. Combining the SCPC and Equifax datasets makes it possible to examine consumers' payment behavior in the context of the larger picture of their finances (Fulford and Schuh 2015).[32] Future research will describe the characteristics of respondents in the Equifax/SCPC matched group (Cole and Schuh forthcoming) and estimate credit card adoption and use with calculations based on the Equifax credit card data.

In addition, there is evidence that consumers find it difficult to report accurately on the state of their finances. For example, Karlan and Zinman (2008) find that households underreport debt and de Bruin et al. (2011 and 2012) find that question wording is influential in respondent answers. This difficulty makes it desirable to compare individual respondents' answers to

[31] SCPC Table 30, authors' calculations.

[32] Equifax data are available only to researchers employed by, or officially affiliated with, the Federal Reserve Board or the Federal Reserve Banks; it is not part of the public dataset for the SCPC.

externally available data like the Equifax data. Comparing SCPC and Equifax data makes it possible to evaluate SCPC response quality and potentially redesign or eliminate questions that, after analysis, seem to yield unreliable data. (It is important to note that both SCPC and credit bureau data can be subject to error, depending upon circumstances.)

As part of our research study to understand how people make decisions involving their credit, we have a request for you to consider. In addition to the survey, we would like your permission to request your credit report. The process we would use is called a "soft pull." A soft pull is simply an inquiry, versus a "hard pull," which is part of an application for credit. Soft pulls will not affect your credit in any way. This component is completely optional and you can complete the survey without authorizing soft pulls of your credit report. Any information we do receive will be kept confidential. As a reminder your survey responses and personal information is never linked with your name. Do we have your permission to pull your credit report?

Source: 2015 Survey of Consumer Payment Choice questionnaire.

Table 4: Text of credit report matching permission request

An essential part of the value of the matched SCPC/Equifax data is the degree to which respondents give permission to have their credit reports anonymously matched to their survey responses. Permission is requested out of respect for respondents' preferences, to ensure they are fully informed about the conduct of the SCPC, and to comply with institutional review board (IRB) requirements for research involving human subjects. In 2015, one-third of SCPC respondents gave permission to have their credit report data matched anonymously to their SCPC responses (Table 4), and 99.3 percent of those who consented were successfully matched. Equifax archives for 2014 (snapshots as of month-end September and October) and 2015 (snapshots for month-end September, October, November, and December) were matched to survey responses. As noted above, the survey dataset does not contain any personally identifiable information.

Variables of Interest	Equifax	SCPC
Demographics	✓	✓
Risk score	✓	✓
Bankruptcy	✓	✓
Credit cards: number, unpaid balance, credit limit	✓	✓
Loans and mortgages	✓	✓

Source: 2015 Survey of Consumer Payment Choice, authors' analysis.

Table 5: SCPC plus Equifax dataset

The Equifax dataset includes more than 600 variables on credit and debt, including auto loans, student loans, and mortgages (Table 5 shows some variables present in both datasets). Cole and Schuh (forthcoming) compare survey responses from the SCPC with data as reported by lenders to Equifax; preliminary analysis shows that the two datasets are highly correlated, with correlation coefficients ranging from 0.71 to 0.96 across all variables analyzed.

VII. Survey methodology and data

The results of the 2015 SCPC reflect a new sampling frame and modest changes to the questionnaire introduced to improve the overall quality and measurement of consumer payment choices and to tighten the relationship with the DCPC.

A. New sampling frame

From 2008 through 2014, the SCPC was developed by the CPRC of the Boston Fed and implemented by the RAND Corporation as an online survey, using RAND's American Life Panel (ALP). In 2014–15, the SCPC was implemented using a new panel, the Understanding America Study, managed by the University of Southern California (USC) Dornsife Center for Economic and Social Research (CESR).[33] Both the UAS and the ALP are representative panels of U.S. consumers. The primary advantage of the UAS is that its panel members are recruited and

[33] 2014 UAS results are not part of the official SCPC dataset and have not yet been released.

assembled exclusively using frontier methods of sampling as described in Messer and Dillman (2011). The UAS panel is recruited using only address-based sampling methods.[34] In 2015, 1,429 members of the UAS panel took the SCPC, about 25 percent fewer respondents than took the SCPC 2009–2013. Of the 2015 respondents, about two-thirds (917) also took the 2014 SCPC. The 2014 UAS respondents are not included in the official 2014 SCPC report, which is based entirely on the ALP.

In addition, respondents from two supplementary samples took the 2015 SCPC. An additional 504 respondents were recruited via the market research firm GfK to meet sample size requirements. Due to differences in the sampling frames and distributions of survey responses for items such as adoption of certain payment instruments, cash withdrawals, and the number of monthly uses of payment instruments, the GfK respondents are omitted from the official tables and summary report, pending further analysis.[35]

Eventually, the CPRC plans to release a full time-series of the SCPC beginning in 2008 and encompassing both the RAND and USC datasets on a consistent basis by splicing the two data sources using statistical methods that control for differences in sampling frames.[36] Pending those statistical computations, however, data users should not attempt to discern any trends by comparing the 2015 USC survey results to prior years' RAND results. A report comparing the results of the two samples (UAS and ALP) who took the identical 2014 SCPC and the implications for accurate population estimates is expected to be released later in 2017.[37]

[34] In contrast, the ALP was recruited using a combination of methods (convenience [respondents to prior surveys], snowball [referrals from respondents], and address-based).

[35] An oversample of 105 self-reported virtual currency adopters (current or former) took the SCPC in a module administered by Qualtrics. To qualify to participate, respondents asserted that they owned or had previously owned bitcoin or one of 14 other virtual currencies (including Ripple, Litecoin, Dash, and Dogecoin). These responses were deemed largely erroneous and are therefore omitted from the official tables and survey summary report.

[36] Future research will compare and contrast the demographic composition, payments assessments, and behaviors in the ALP and UAS datasets, in a manner analogous to the analysis of 2012 SCPC subsample data reported in Hitczenko (2015), as it is important to discern whether SCPC survey responses differ between the two samples and, if so, why they differ.

[37] In 2014 and 2015, there were some unexpected differences in SCPC results, even when accounting for demographics. Therefore, longitudinal results from 2014 are not reported here, pending further analysis.

B. Questionnaire changes

In 2015, some questionnaire changes were made to tighten the relationship between the DCPC and the SCPC. Other small changes to the questionnaire were introduced to improve overall quality. These changes include asking consumers to report account balances of checking account(s) and the total limit on all their credit cards to get a sense of resources that could be available for spending. Questions about bank and nonbank account adoption, payment instrument adoption, and account balances and credit limits all are important for implementing and analyzing the DCPC.

Also in 2015, questions were added to gather additional details about the management of respondents' checking accounts, including whether or not they are linked to a savings account, are a joint account (and with whom), and have overdraft protection. In addition, questions were added to probe consumers' reasons for not adopting some payment instruments and methods, including ATM and debit cards, credit cards, GPR prepaid cards, automatic bill pay, and virtual currency. For owners of virtual currency, new follow-up questions probe quantities and values held and the use of virtual currencies to make payments. A new question asks consumers if they use any of some common personal financial management (PFM) tools, for example, Mint.com. In addition, an experimental question probed respondents' reasons for storing cash. For detail about questionnaire changes, see the technical appendix (Angrisani, Foster, and Hitczenko 2017).

C. Diary of Consumer Payment Choice

Taken together, the SCPC and the Boston Fed's Diary of Consumer Payment Choice (DCPC) provide complementary views of consumer payments behavior. The SCPC obtains data on consumer payment use by relying on respondent recall about a typical period. (Respondents may check financial records but are not required to do so.) The DCPC, fielded with support from the Federal Reserve Banks of Richmond and San Francisco, augments that data by asking respondents to record information about specific payments as they occur, with daily recording

over three days.[38] Both result in estimates of the monthly number of payments by payment instrument. The DCPC methodology makes it possible to collect detailed information about individual payments, including dollar value, in the context of available assets (cash on hand or stored elsewhere, account balances). Largely because of potential measurement error from recall, the SCPC collects the number of payments made by consumers and not the dollar value of those payments. Payment diaries that ask respondents to record daily their payments (and cash withdrawals) have been found to measure consumer payments effectively.[39] All 2015 DCPC respondents also took the 2015 SCPC. Respondents take the SCPC first, and then information gathered by the SCPC feeds in to questions in the DCPC.

VIII. Conclusions

The 2015 SCPC provides a snapshot of U.S. consumer payment choices that reflects widespread diversity and the influence of new payment innovations, but also reliance on cash. The 2015 SCPC is based on an improved sampling frame (hence, there are potential differences in unobserved respondent characteristics) but a smaller-than-usual sample size (hence less statistical precision). For these reasons, the 2015 estimates should not be compared with the 2008–2014 SCPC estimates at this time. Debit cards, cash, and credit cards are the three instruments used most commonly by U.S. consumers for payment. Consumers have many payment options; more than half of U.S. consumers have six or more payment instruments. They use some options more intensively than others. Over the course of the year, consumers who have set up OBBP and who own prepaid cards are relatively unlikely to use them, compared with other payment instrument choices like debit cards or cash, which were used at least once to make a payment in the year by at least 80 percent of adopters. Two-thirds of consumers reported adopting an account or app that would permit them to make a payment

[38] For more description of the Diary of Consumer Payment Choice, see Schuh (forthcoming) and Greene, O'Brien, and Schuh (forthcoming).

[39] See Bagnall et al. (2016) for an introduction to payment diaries in seven industrial countries, most of which were sponsored by central banks. The International Association of Currency Affairs (IACA) was particularly instrumental in facilitating the collaboration of central banks and other payments researchers to develop payment diaries, starting with a conference in 2010; special thanks are due to Adrian Baxter, Eugenie Foster, and Rick Haycock.

using a mobile phone, but just one-quarter made a mobile payment in the 12 months ending in October 2015.

More than 90 percent of U.S. consumers had a bank account (checking or savings) in 2015; half owned nonbank payment accounts. The median balance in adopters' checking accounts (up to two accounts) is $1,000,[40] compared with about $50 in median total cash holdings. In addition, three in 10 consumers owned GPR prepaid cards, which can be used to receive and store money as well as to make payments. Few consumers have adopted virtual currencies, such as bitcoin. Most of those who used AFS tapped payments services like money orders or check cashing; fewer used AFS financing.

IX. Definitions of concepts

This section contains tables with the definitions of concepts used in the Survey of Consumer Payment Choice (SCPC) questionnaire and in the construction of the official tables of statistics. Some of the definitions presented to the survey respondents may have been phrased differently from the way they are specified here. For more information, consult the SCPC questionnaire, which is available online.

[40] For respondents with two or more accounts, the sum of balances of the primary and secondary accounts. For respondents with one account, the account balance.

Definitions Table 1 – Banking Concepts

Concept	Definition
Asset	Any item of monetary value, including bank accounts, real estate, stocks, bonds, annuities, retirement accounts, motor vehicles, jewelry, rare or collectible goods, and personal or household goods.
Automated Teller Machine (ATM)	A machine that allows customers to access their bank accounts with an ATM card, debit card, or credit card to withdraw cash, make deposits, view account balances, transfer money, and perform other related banking transactions.
ATM card	A card that allows a customer to deposit or withdraw cash from an automated teller machine, but cannot be used for purchases or payments.
Bank	An institution that accepts deposits and offers checking accounts or savings accounts. Includes regular or internet-based commercial banks, credit unions, and savings and loan associations.
Checking account	An account that allows a customer to make payments or withdrawals as often as necessary, using checks, debit or ATM cards, or online or pre-authorized withdrawal payments. Some checking accounts pay interest on deposits and may be called money market checking accounts.
Mobile banking	A method of accessing one's bank account via a mobile phone, either by accessing the bank's web page on one's mobile phone, via text messaging, by reading emails from the bank, or by using a downloadable app on one's mobile phone.
Money market account	A type of savings account offered by banks and credit unions. Similar to a regular savings account. The difference is that money market accounts usually pay higher interest, have higher minimum balance requirements, and allow fewer withdrawals per month. Another difference is that, similar to a checking account, many money market accounts allow the customer write up to three checks each month.
Nonbank online payment account	A payment service provided by a company that is not a bank. These services allow an individual to send and receive money online.
Online banking	A method of accessing a bank account via a bank's website, to perform such actions as viewing account balances, transferring funds between accounts, or paying bills electronically.
Savings account	Savings accounts allow only a limited number of payments, withdrawals, or transfers. Savings accounts pay interest on deposits at rates that are usually higher than rates on interest-bearing checking accounts. Examples include traditional savings accounts, money market savings accounts, Christmas Club accounts, and Coverdell or 529 education accounts.
Telephone banking	A method by which a bank's customer can access his or her account by calling a phone number that the bank has provided. The customer interacts with the system using voice commands, by using the phone's numeric keypad, or by speaking with a live customer service representative.

Definitions Table 2 – Payment Instruments

Concept	Definition
Bank account number payment (BANP)	A payment made by providing one's bank account number to a third party, such as one's employer or a utility company. The number can be given on websites, paper forms, etc.
Cash	Coins and paper bills.
Check	A piece of paper directing a financial institution to pay a specific amount of money to a person or business.
Credit card	A card that allows the cardholder to make a purchase by borrowing funds that will be paid back to the credit card company later.
Debit card	A type of card that allows one to make purchases or payments by accessing funds in one's bank account, in addition to allowing one access to one's bank accounts through an ATM.
Money order	A type of payment that can be purchased from a bank or other institution and allows the individual named on the order to receive a specified amount of cash on demand.
Online banking bill payment (OBBP)	A payment made from a bank's online banking website or online mobile app that accesses funds from a customer's checking or savings account to pay a bill or to pay other people. This payment does not require the customer or the bank to disclose his or her bank account number to a third party.
Prepaid card	A card that either stores or records a dollar value. Also known as a stored value card or gift card. Some of these cards may have a Visa, MasterCard, Discover, or American Express logo on them, but they are not a credit or debit card. Some cards, for example, a phone card, are for specific types of payment, and others, like a NetSpend or Green Dot card, work for many types of payment. In addition, there are government-issued prepaid cards, such as an EBT, Direct Express, SNAP, and TANF card. Most prepaid cards have a dollar value that can be used to make payments, which are deducted from the value stored on the card. Other types of prepaid cards, such as a monthly public transit pass, may be valid for use over a specific period of time, rather than having the value of the payment deducted each time the card is used.
Traveler's check	A piece of paper that is similar to a check but works like cash and is protected against loss or theft. Traveler's checks are purchased in advance and issued for a specific amount of money.
Deduction from income	Direct payments from income, for example, automatic deductions for an employee's portion of health insurance or for transportation expenses (applies only for automatic bill payments).

Definitions Table 3 – Adoption

Concept	Consumer Behavior that Defines Adoption
ATM card*	Has an ATM card.
Bank account	Has at least one checking account or savings account.
Cash	Has used cash to make a payment at least once in the past 12 months, holds cash (on person or on property), gets cash on a regular basis, or uses cash in a typical year.
Cell phone	Has a cell phone.
Check	Has used a check to make a payment at least once in the past 12 months, currently has blank checks, or uses check in a typical year.
Checking account	Has at least one checking account.
Credit card*	Has a credit card.
Current adoption	The percentage of consumers who own a bank account or have a payment instrument and have not discarded it as of the time of the survey.
Debit card*	Has a debit card.
Discarding rate	The difference between historical and current adoption or ownership rates. It measures the minimum percentage of consumers who owned a bank account or had a payment instrument, but discarded it and thus do not own or have it now.
Bank account number payment (BANP)	Makes an electronic bank account number payment in a typical year.
Historical adoption	The percentage of consumers who have ever owned a bank account or had a payment instrument at any time (currently or in the past).
Mobile banking	Has a bank account, has a cell phone, and has set up mobile banking.
Money order	Has used a money order in the past 12 months.
Nonbank online payment account	Has at least one nonbank online payment account.
Online banking bill payment* (OBBP)	Has a bank account, has set up online banking, and has set up access to the online bill payment function.
Online banking*	Has a bank account and has set up online banking.
Ownership	Equivalent to adoption, but for bank accounts.
Prepaid card*	Has a prepaid card of any type.
Savings account	Has at least one savings account.
Smart phone	Has a smart phone.
Telephone banking*	Has a bank account and has set up telephone banking.
Travelers' check	Has used a travelers' check in the past 12 months.

*In a small number of cases where respondents did not answer the direct adoption question for this concept, additional information from other questions was used to infer adoption in a manner consistent with the primary definition.

Definitions Table 4 – Payment Use

Concept	Consumer Behavior that Defines Use
Frequency of use	See "Use."
Incidence of use	The percentage of consumers who have used a particular payment instrument at least once during a typical period of time.
Incidence of use, annual	The percentage of consumers who have used a particular payment instrument at least once in a typical year.
Incidence of use, monthly	The percentage of consumers who have used a particular payment instrument at least once in a typical month.
Use	The number of times consumers use a particular instrument for payment during a typical month ("use" for a typical week or year was converted to a typical month for comparability).
Typical period	A recent week, month, or year in which the consumer did not experience any unusual payments or other related events. Consumers choose the reporting frequency they prefer most. The most recent period is implied and assumed but not stated explicitly in the survey questions.

Definitions Table 5 – Transaction Types

Concept	Definition
Automatic bill payment	A bill payment set up to occur on a regularly scheduled basis, typically monthly. Once set up, these do not require any additional effort on the consumer's part. They can be processed via bank account deductions, debit card transactions, or credit card charges, or be paid directly from the consumer's income.
Bill payment	A payment made to a company or person at some date after the time when the company or person provided goods or services to a consumer. Examples include a payment to a utility company for energy services provided during a month or a payment to service a loan such as a mortgage payment. Most bill payments occur at regular frequencies such as weekly, monthly, or yearly.
By mail, in person, or by phone bill payment	Payments for bills, subscriptions, or debt payments that one mails in, pays in person, or calls in on one's phone.
Online bill payment (OBP)	Payments made online for bills, subscriptions, or debt payments, but not set up to be paid automatically.
Online payment (OP)	Payments for items bought over the internet or donations made online.
Person-to-person payment	Payments to people not made through a retail establishment, such as payments for allowances, paying back a friend, or gifts to other people.
Retail purchases of goods	Purchases of goods at stores, such as grocery stores, superstores, department stores, or drug stores.
Retail services and other payments	Purchases of services, such as those made at restaurants, bars, fast food and beverage establishments, transportation and toll locations, doctor's visits, or for child care, haircuts, education, recreation, and entertainment.

Definitions Table 6 – Payment Instrument Characteristics

Concept	Definition
Acceptance for payment	How likely each payment method is to be **ACCEPTED** for payment by stores, companies, online merchants, and other people or organizations.
Convenience	The **CONVENIENCE** consumers attribute to each payment method. *Examples: speed; record keeping; control over payment timing; ease of use; effort to carry, get, or set up; ability to keep or store.*
Cost	The **COST** of using each payment method. *Examples: fees, penalties, postage, interest paid or lost, subscriptions or materials raise the cost; cash discounts and rewards (like frequent flyer miles) reduce the cost.*
Getting & setting up	The task of **GETTING & SETTING UP** each payment method before a consumer can use it. *Examples: getting cash at the ATM, length of time to get or set up a credit card, learning to use or install online banking bill pay.*
Payment records	The quality of **PAYMENT RECORDS** offered by each method of payment, as assessed by consumers, taking into consideration both paper and electronic records. *Examples: proof of purchase, account balances, spending history, usefulness in correcting errors or dispute resolution, and ease of storage.*
Security	The **SECURITY** of each method against permanent financial loss or unwanted disclosure of personal information, in the event that a payment method has been stolen, misused, or accessed without the owner's permission.

Definitions Table 7 – Other Terms and Concepts

Concept	Definition
Contactless payment technology	Allows the consumer to make a payment by tapping or waving a card or other instrument near a special electronic reading device without swiping, signing, or entering a personal identification number.
Electronic toll payment	A contactless payment technology that allows motor vehicle drivers to drive through a toll without stopping and have the toll automatically billed to them, rather than stopping to pay. Examples are EZ-Pass, I-Pass, Smart Lane, and Smart Tag. The payment can be made from a bank account, by credit card, and sometimes by other methods.
Identity theft or fraud	All types of crime in which someone uses (or attempts to use) someone else's personal information or data without the owner's permission to purchase goods or services, make payments, steal money, set up accounts, or commit fraud. Examples of information used include name and address, Social Security number, credit card or debit card number, and other related financial information.

Concept	Definition
Key fob	A contactless payment technology that attaches to a key chain. Key fobs are branded by gas stations and credit card companies such as American Express, Visa, and MasterCard. An example is the Mobil Speedpass.
Overdraft protection	A service that a bank provides when a customer makes a transaction that exceeds his or her account balance. It covers the difference between the transaction amount and the account balance and enables the customer to avoid incurring a fee from the retailer or merchant for having insufficient funds. Overdraft protection can be activated by linking a savings account or credit card to a checking account, or through overdraft insurance, for instance.
Overdraft	Withdrawal of more money from a bank account than is currently in the account (also termed "insufficient funds"). Overdraft may occur, for example, when paying with a check, debit card, or electronic deduction.
Paid directly from income	A payment made for a consumer by an employer or other income provider directly from the consumer's wages, salary, or other income payment (such as interest, dividends, social security payments, retirement plan distributions, alimony, child support, welfare, trust fund distributions, or other money received).
Reward	Any type of benefit given to payment cardholders when they use their card to make purchases and other payments. A reward is usually proportional to the dollar value of the purchase or payment. Examples include: cash back (a percentage of the dollar value), frequent flyer miles (airlines), frequent stay points (lodging), college tuition funding, and shopping network points.
Unbanked	A person who does not have any checking or savings accounts at a bank, credit union, brokerage, or investment firm.
Underbanked	Following the FDIC definition, a person who has a checking or savings account and who has purchased any of five services from a nonbank in the past 12 months (money order, cashier's checks, check cashing, remittances, and payday loans) and/or who has used personal property to secure a loan at a pawn shop, used rent-to-own services, or taken out a tax refund anticipation loan.
Virtual currency	Virtual or digital currencies exist online and are different from U.S. dollars ($), the euro (€), or other official foreign currencies. They are sometimes called cryptocurrencies

X. SCPC Board of Advisors, 2017

Barbara Bennett (joined 2009)
Federal Reserve System

Debbie Bianucci (2013)
Bank Administration Institute

Ron Borzekowski (2016)
Consumer Financial Protection Bureau

Andrew Caplin (2009)
New York University

Christopher Carroll (2014)
Johns Hopkins University

Bob Chakravorti (2012)

Karyen Chu (2016)
Federal Deposit Insurance Corporation

Richard Curtin (2009)
University of Michigan

Janet Estep (2013)
NACHA

Geoffrey Gerdes (2009)
Federal Reserve Board

Ray Graber (2013)
Graber Associates

Chad Harper (2009 and 2015)
FRB Richmond

Fumiko Hayashi (2009)
FRB Kansas City

Tony Hayes (2013)
Oliver Wyman

Robert Hunt (2013)
FRB Philadelphia

Kim P. Huynh (2013)
Bank of Canada

Elizabeth Kiser (2017)
Federal Reserve Board

Dan Latimore (2017)
Celent

Dan Littman (2009)
FRB Cleveland

May Liu (2011)
Federal Reserve Board

Leon Majors (2009)
ESP/Phoenix Consulting

Bill McCracken (2009)
Synergistics Research

Aaron McPherson (2009)

Kevin Moore (2015)
Federal Reserve Board

Steve Mott (2010)
BetterBuyDesign

Adam Safir (2014)
Bureau of Labor Statistics

Max Schmeiser (2015)
Amazon Lending

Martha Starr (2009)
American University

Wilbert van der Klaauw (2016)
FRB New York

Joe Waring (2017)
MasterCard Advisors

Martin Weiderstrand (2010)
Ikea

Tom Welander (2009)
McKinsey

Jane Yao (2009)
American Bankers Association

Jay Zagorsky (2010)
Ohio State University

Former Advisors

Carlos Arango (2009–2010)
Bank of Canada

Paul Bauer (2009)
FRB Cleveland

Marla Blow (2013–2014)
Consumer Financial Protection Bureau

Peter Burns (2009–2012)
FRB Philadelphia (retired)

Jeff Carter (2009)
MIT Media Lab

David Evans (2011–2016)
Market Platform Dynamics

Dave Humphrey (2009–2014)
Florida State University

Peter Ireland (2009)
Boston College

Roger Johnston (2010–2016)
Fiserv

Beth Klee (2009)
Federal Reserve Board

Rich Oliver (2009–2011)
FRB Atlanta

William Roberds (2011–2012)
FRB Atlanta

Jay Ryan (2013–2014)
Bureau of Labor Statistics

John Sabelhaus (2012–2015)
Federal Reserve Board

Peter Shortall (2013–17)
MasterCard Advisors

Geoffrey Thomas (2011–2012)
Citizens Bank

Chris Van Steenberg (2013–2015)
Citizens Bank

Adrienne Wells (2009–2010)
FRB Atlanta

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XII. 2015 SCPC Tables

2015 SCPC Table of Contents

Adoption of Accounts and Payment Instruments

Liquid Assets and Asset Management

Incidence of Use of Accounts and Payment Instruments

Frequency of Use of Payment Instruments

Loss, Theft, or Fraud

Assessments

Household Characteristics

Notes to the SCPC Tables

Numeric superscripts in tables correspond to the notes listed below. Extra footnotes on each table are otherwise indicated by a symbol and explained below the table. For definitions of concepts in these tables please refer to **Section IX, Definitions and Concepts.**

Footnote	Description
General	
1	The em-dash notation (—) indicates that the estimate is not available, often because the related survey question was not asked in the associated year.
2	Numbers may not sum exactly due to rounding or missing values.
3	Dollar values are not adjusted for inflation [applies to Tables 16, 17, 18, 20, 39, 41].
4	The nine available payment instruments are cash, check, money order, traveler's check, debit card, credit card, prepaid card, online banking bill payment, and bank account number payment [applies to Tables 15, 34].
Adoption	
5	Adoption of payment instrument means the consumer had the instrument, with the following exceptions: a. For cash, adoption means the consumer used the instrument in the given year, held it on person, held it on property, or had obtained it at least once in a given year [applies to Tables 7, 8, 9, 15, 22, 23b]. b. For money order, traveler's check, bank account number payment, and direct deduction from income, adoption means the consumer used the instrument or method in a given year [applies to Tables 7, 8, 9, 15, 17, 20, 22, 23b]. c. For online banking bill payment, adoption means having signed up for online banking bill pay at a bank's website [applies to Tables 7, 8, 9, 15, 23b].
6	Historical adoption or ownership includes current adopters as well as respondents who stated that they have used an account or technology in the past, but currently do not adopt the account and technology [applies to Tables 2, 9].
7	Discarded refers to the difference between historical adoption or ownership and current adoption or ownership rates [applies to Tables 3, 10].
8	General purpose credit cards have a network logo such as Visa, MasterCard, Discover, or American Express. Branded cards also have a merchant's logo on the card. Some branded cards have a merchant logo only (no payment network). Charge cards require full payment of the balance at the end of each billing period [applies to Tables 11, 13].
9	Mobile banking adoption is defined as having downloaded a mobile banking app, or having performed one of the following activities using a mobile phone: (1) Checked a balance or recent transaction; (2) Paid a bill; (3) Received a text message alert from bank; (4) Transferred money between two accounts; (5) Took a photo of a check to deposit it; (6) Sent a text message to one's bank [applies to Tables 1, 2, 3].
Prepaid Cards	

10	General-purpose prepaid cards have a credit card network or PIN network logo and can be used at any merchant or retailer that accepts cards from that network. Specific-purpose prepaid cards, such as gift cards or public transportation cards, are limited in use to one or several merchants, retailers, or service providers [applies to Table 12].

Other

11	The notation "s" indicates that the cell was suppressed due to an insufficient number of observations.

Table 1

Current Ownership of Accounts and Account Access Technologies

Percentage of consumers

Deposit and payment accounts	**97.8**
Bank deposit accounts	**91.8**
Checking	91.1
Primary account jointly owned	45.5
Primary account earns interest	34.3
Primary account has overdraft protection	62.9
Linked checking and savings accounts*	75.0
Savings	73.3
Nonbank payment accounts‡	**49.1**
PayPal	42.9
Other	16.0
Other accounts	**89.7**
Prepaid cards (bank and nonbank)†	60.8
Credit and charge cards	76.9
Deposit account access technologies	**89.5**
ATM card	86.5
ATM card (no debit feature)	34.2
Debit card	80.8
Telephone banking	38.6
Online banking	71.4
Mobile banking	45.0
Personal financial management tools	**7.2**
Mint.com	4.3
Other	3.1
Information and communication technologies	**94.6**
Mobile phone	94.6
Smart phone (iPhone, Android, BlackBerry, etc.)	77.8

* This estimate is the percentage of those who have adopted both checking and savings accounts.

† The survey does not distinguish between prepaid cards issued by banks versus those issued by nonbanks.

‡ Nonbank payment accounts are PayPal, Amazon Payments, Google Wallet, and Venmo.

Notes: 2, 9.

Table 2

Historical Ownership of Accounts and Account Access Technologies

Percentage of consumers

Deposit and payment accounts	**98.3**
Bank deposit accounts	**96.6**
Checking	95.8
Primary account jointly owned	—
Primary account earns interest	—
Primary account has overdraft protection	—
Linked checking and savings accounts	—
Savings	89.5
Nonbank payment accounts	—
PayPal	—
Other	—
Other accounts	**94.8**
Prepaid cards (bank and nonbank)*	76.0
Credit and charge cards	87.7
Deposit account access technologies	**94.7**
ATM card	92.7
ATM card (no debit feature)	54.0
Debit card	89.0
Telephone banking	47.3
Online banking	78.1
Mobile banking	—
Personal financial management tools	—
Mint.com	—
Other	—
Information and communication technologies	**98.2**
Mobile phone	98.2
Smart phone (iPhone, Android, BlackBerry, etc.)	—

* The survey does not distinguish between prepaid cards issued by banks versus those issued by nonbanks.

Notes: 1, 2, 6, 9.

Table 3

Discarding of Accounts and Account Access Technologies

Percentage of consumers

Deposit and payment accounts	**1.4**
Bank deposit accounts	**5.1**
Checking	4.9
Primary account jointly owned	—
Primary account earns interest	—
Primary account has overdraft protection	—
Linked checking and savings accounts	—
Savings	16.4
Nonbank payment accounts	—
PayPal	—
Other	—
Other accounts	**5.5**
Prepaid cards (bank and nonbank)*	16.8
Credit and charge cards	11.2
Deposit account access technologies	**5.4**
ATM card	6.4
ATM card (no debit feature)	19.7
Debit card	8.5
Telephone banking	8.5
Online banking	6.6
Mobile banking	—
Personal financial management tools	—
Mint.com	—
Other	—
Information and communication technologies	**3.6**
Mobile phone	3.6
Smart phone (iPhone, Android, BlackBerry, etc.)	—

* The survey does not distinguish between prepaid cards issued by banks versus those issued by nonbanks.

Notes: 1, 2, 7, 9.

Table 4

Current Adoption of Payment Technologies

Percentage of consumers, except as noted

Mobile apps or online accounts	**63.6**
Amazon Payments	10.8
Android Pay	2.2
Apple Pay	6.5
Dash	0.0
Facebook Messenger	24.1
Google Wallet	5.4
iTunes	24.9
LevelUp	0.5
LoopPay	0.0
PayPal	42.9
PopMoney	0.6
Stripe	0.0
Venmo	1.3
Has phone app funded by prepaid card	16.3
Mobile phone payments*	**23.3**
Text message payment	5.1
Tap phone and pay at point of sale	8.0
Scanned QR code or showed phone to pay	9.9
Used mobile app while not at point of sale	13.2
Most common payment method for mobile phone payments, excluding text message payments†	
Credit card	39.0
Debit card	52.9
Prepaid card	8.1
Bank account number	0.0
Other	0.0

* Adopting a mobile phone technology is defined as using one of the listed actions in the past 12 months.

† Share of consumers who made a mobile phone payment.

Notes:

Table 5a

Bank Account Holdings, by Type of Deposit Account and Financial Institution

Percentage of consumers*

Primary checking account	**91.1**
Commercial bank	61.3
Savings and loan	3.7
Credit union	23.2
Brokerage	0.4
Internet bank	1.0
Other	1.5
Secondary checking account	**35.7**
Commercial bank	21.8
Savings and loan	2.2
Credit union	9.8
Brokerage	1.0
Internet bank	0.7
Other	0.3
Primary savings account	**73.3**
Commercial bank	40.3
Savings and loan	3.4
Credit union	24.2
Brokerage	1.9
Internet bank	2.6
Other	0.8

* Due to missing values, percentages do not add up to the percent of adopters of checking or savings accounts from Table 1.

Notes: 2.

Table 5b

Bank Account Holdings, by Type of Deposit Account and Financial Institution

Percentage of account adopters*

Primary checking account	**100.0**
Commercial bank	67.3
Savings and loan	4.0
Credit union	25.4
Brokerage	0.4
Internet bank	1.1
Other	1.6
Secondary checking account	**100.0**
Commercial bank	61.0
Savings and loan	6.1
Credit union	27.5
Brokerage	2.7
Internet bank	1.9
Other	0.8
Primary savings account	**100.0**
Commercial bank	55.0
Savings and loan	4.6
Credit union	33.1
Brokerage	2.6
Internet bank	3.6
Other	1.1

* Adopters are respondents who have identified themselves as owning and/or using that type of account. For example, 67.3 percent of checking account adopters identified "commercial bank" as the location of their primary checking account in .

Notes: 2.

Table 6

Interest rates on primary accounts

Percentage of adopters of checking or savings accounts

Primary checking account interest rate	
0%	62.4
0.01–0.05	20.5
0.06–0.10	3.3
0.11–0.15	1.3
0.16–0.20	1.4
0.21–0.25	1.1
0.26–0.50	0.6
0.51–0.75	0.7
0.76–1.00	0.7
1.01–1.50	1.6
1.51–2.00	0.5
More than 2%	1.7
Don't know	4.2
Secondary checking account interest rate	
0%	59.9
0.01–0.05	19.6
0.06–0.10	3.0
0.11–0.15	1.2
0.16–0.20	1.5
0.21–0.25	0.9
0.26–0.50	1.1
0.51–0.75	1.3
0.76–1.00	1.7
1.01–1.50	1.3
1.51–2.00	0.9
More than 2%	2.4
Don't know	5.1
Savings account interest rate	
0%	12.6
0.01–0.05	39.4
0.06–0.10	12.7
0.11–0.15	3.3
0.16–0.20	2.0
0.21–0.25	3.4
0.26–0.50	2.2
0.51–0.75	2.3
0.76–1.00	4.0
1.01–1.50	4.2
1.51–2.00	1.6
More than 2%	1.7
Don't know	10.5

Notes: 2.

Table 7

Current Adoption of Payment Instruments, by Type of Asset or Liability
Percentage of consumers

Assets	**99.8**
Money (M1)*	**99.7**
Cash (currency)	99.7
Traveler's check	0.6
Demand deposit accounts, consumer	91.8
Checks	82.2
Certified	12.3
Debit card	80.8
Online banking bill payment	49.6
Bank account number payment	66.0
Other deposit accounts	
Cashier's check	9.9
Private currency	**0.6**
Bitcoin	0.2
Other kinds of virtual currency	0.3
Unknown asset type†	**72.3**
Money order	20.2
Prepaid card	60.8
Liabilities	**76.9**
Credit or charge card	76.9
Credit	75.7
Charge	5.0
Text/SMS mobile payment	5.1
Other means of payment	**16.0**
Direct deduction from income	16.0

* For official definition of M1, see Federal Reserve Statistical Release H.6.

† These types are "unknown" because it is unknown if the underlying funds are held in a deposit account or not.

Notes: 2, 5.

Table 8

Current Adoption of Payment Instruments, by Form of Instrument and Other Means of Payment
Percentage of consumers

Paper instruments	**99.7**
Cash	99.7
Checks	82.2
Certified check	12.3
Cash and check substitutes	30.6
Money order	20.2
Traveler's check	0.6
Cashier's check	9.9
Payment cards	**96.9**
Debit	80.8
Credit or charge	76.9
Credit	75.7
Charge	5.0
Prepaid	60.8
Electronic payments	**78.0**
Online banking bill payment	49.6
Bank account number payment	66.0
Private currency	0.6
Bitcoin	0.2
Other kinds of virtual currency	0.3
Other means of payment	**16.0**
Direct deduction from income	16.0
Addendum: Virtual currency awareness	***41.3***
Bitcoin	38.5
Other kinds of virtual currency	8.4

Notes: 2, 5.

Table 9

Historical Adoption of Payment Instruments, by Form of Instrument and Other Means of Payment
Percentage of consumers

Paper instruments	—
Cash	—
Checks	—
Certified check	—
Cash and check substitutes	—
Money order	78.3
Traveler's check	40.1
Cashier's check	58.3
Payment cards	**98.4**
Debit	89.0
Credit or charge	87.7
Credit	—
Charge	—
Prepaid	77.3
Electronic payments	—
Online banking bill payment	53.7
Bank account number payment	—
Private currency	1.0
Bitcoin	0.7
Other kinds of virtual currency	0.3
Other means of payment	—
Direct deduction from income	—

Notes: 1, 2, 5, 6.

Table 10

Discarding of Payment Instruments, by Form of Instrument and Other Means of Payment
Percentage of consumers

Paper instruments	—
Cash	—
Checks	—
Certified check	—
Cash and check substitutes	—
Money order	58.2
Traveler's check	39.6
Cashier's check	48.5
Payment cards	**2.2**
Debit	8.5
Credit or charge	11.2
Credit	—
Charge	—
Prepaid	16.8
Electronic payments	—
Online banking bill payment	4.6
Bank account number payment	—
Private currency	0.5
Bitcoin	0.5
Other kinds of virtual currency	0.0
Other means of payment	—
Direct deduction from income	—

Notes: 1, 2, 7.

Table 11

Current Adoption of Debit, Credit, and Charge Cards, by Instrument Type and Features
Percentage of consumers

Debit cards	**80.8**
Rewards	15.8
Credit cards or charge cards	**76.9**
Rewards*	61.6
Nonrewards	41.0
Credit cards	**75.7**
Rewards	61.2
Nonrewards	40.9
General purpose	73.0
Rewards	58.7
Nonrewards	32.6
Visa, MasterCard, Discover	72.0
Visa	60.7
MasterCard	42.5
Discover	17.9
American Express	15.8
Company or store branded	40.0
Rewards	25.1
Nonrewards	19.5
Charge cards	**5.0**
Rewards	3.4
Nonrewards	1.9
American Express charge cards	4.0
Rewards	3.0
Nonrewards	1.2
Diners Club or other charge cards	1.3
Rewards	0.5
Nonrewards	1.0

* The sum of "Rewards" and "Nonrewards" can add up to more than total in the bold row above because consumers can adopt both at the same time.

Notes: 2, 8.

Table 12

Current Adoption of Prepaid Cards, by Type and Features

Percentage of consumers

Prepaid cards	**60.8**
General-purpose prepaid cards	29.1
Government related	**16.6**
Direct Express card	1.4
Electronic benefits transfer (EBT) card	8.7
Public transportation card	7.5
Other federal, state, or local government benefit card	2.7
Employer related	**14.7**
Payroll card	1.6
Incentive card	1.9
Benefit card	12.0
Other	**45.7**
Gift card	32.3
Phone card	2.7
Remittance card	0.1
Rebate card	8.2
Location specific card	2.1
Other general purpose card	11.1
Other types of passes or membership cards	11.3
Brand name general purpose reloadable prepaid card adoption	**21.6**
Visa Prepaid Card	10.8
MasterCard Prepaid Card	8.6
American Express Bluebird	1.3
Prepaid card from a bank	3.5
NetSpend	2.7
Green Dot	3.0
Walmart MoneyCard	4.9
AccountNow Gold Card	1.1

* The sum of "General purpose prepaid cards" and "Non-general purpose prepaid cards" can add up to more than total in the bold row above because consumers can adopt both at the same time.

Notes: 2, 5, 10.

Table 13

Number of Adopted Accounts and Payment Cards

Mean number per adopter

Deposit accounts*	**3.0**
Checking*	1.6
Savings*	1.8
Payment cards*	**7.1**
ATM card*	2.2
ATM card (no debit feature)*	1.5
Debit card*	1.7
Credit cards or charge cards*	4.1
Rewards†	2.6
Nonrewards†	1.4
Credit cards†	4.0
Rewards†	2.6
Nonrewards†	1.4
General purpose†	2.7
Rewards†	1.9
Nonrewards†	0.9
Branded †	1.3
Rewards†	0.8
Nonrewards†	0.6
Charge cards†	0.1
Rewards†	0.1
Nonrewards†	0.0
Prepaid cards‡	3.1
Government related‡	0.4
Employer related‡	0.3
Other‡	1.9

* Each row uses adopters of that particular payment instrument as the denominator. For example, in 2015, checking account adopters had 1.6 checking accounts.

† These rows use the number of credit or charge card adopters as the denominator.

‡ This row uses the number of prepaid card adopters as the denominator.

Notes: 2, 5, 8.

Table 14a

Reasons for Nonadoption of Accounts and Account Access Methods

Percentage of non-adopters

Checking account	
I don't write enough checks to make it worthwhile	16.0
The minimum balance is too high	3.9
I don't like dealing with banks	28.6
The fees and service charges are too high	16.7
No bank has convenient hours or location	0.3
No bank will give me a checking account	18.6
Other	15.9
ATM card	
My bank did not give me one	5.2
I have a debit card that I can use to get cash	78.7
I get cash from other sources	7.4
I don't use cash often	3.2
Other	5.5
Automatic bill payments	
I like to have more control over when my bills are paid	57.5
I'm worried about identity theft	11.0
I'm worried about overdrafting my bank account	17.2
I can't be sure that my bills will be paid on time	6.6
Other	7.7

Notes: 2.

Table 14b

Reasons for Nonadoption of Payment Instruments

Percentage of non-adopters

Credit card	
My current payment methods meet all of my needs	8.5
I'm worried about my personal or financial information being stolen	2.3
Credit cards are too costly	7.2
I don't want to go into debt	20.6
I only want to spend money that I have	27.3
I applied for a credit card, but it was not approved	9.0
I don't want to pay interest on my purchases	7.0
Interest rates are too high	5.8
Other	12.3
General purpose prepaid card	
My current payment methods meet all of my needs	59.8
I've never heard of this type of card	2.4
There are too many fees for using these types of cards	6.5
No one has given me this type of card	5.5
If I'm going to use a card, I would rather use a debit or credit card	24.5
Other	1.4
Debit card	
My current payment methods meet all of my needs	35.6
I'm worried about a security breach affecting my checking account	3.5
I would rather use a credit card	33.9
I asked my bank not to give me a debit card	4.1
I gave my debit card back to my bank	0.0
I would rather write checks	8.9
My bank did not give me a debit card	0.0
I don't want to overdraft my checking account	0.0
I have an ATM card to get cash	9.6
Other	4.4
Virtual currency *	
I do not understand the technology	28.9
Not accepted for payment very often	4.4
My current payment methods meet all of my needs	51.8
The U.S. dollar value of virtual currency varies too much	1.8
It is not guaranteed by the U.S. government	5.2
It is not easy to acquire or use	3.1
Other	4.8

* The estimates for virtual currency non-adoption measure consumers who have heard of virtual currency, but not adopted it.

Notes: 2.

Table 15

Mean Number of Payment Instruments Adopted by Account and Payment Instrument Adopters
Mean number per consumer or adopter

Available number of payment instruments (all consumers)	**9**
Total (all consumers)	**5.4**
Paper instruments	2.1
Card instruments	2.2
Electronic instruments	1.2
Deposit account adopters	**5.7**
Checking and savings account adopters	5.9
Checking account adopters, no savings	5.3
Paper instrument adopters	**5.4**
Cash adopters	5.4
Check adopters	5.8
Money order adopters	6.0
Traveler's check adopters	s
Payment card adopters	**5.6**
Debit card adopters	5.9
Credit card adopters	6.0
Prepaid card adopters	5.9
Electronic payment adopters	**6.0**
Online banking bill payment adopters	6.4
Bank account number payment adopters	6.1
Deposit account nonadopters	**2.0**

Notes: 2, 4, 5, 11.

Table 16

Liquid Asset Balances

Dollars per consumer, except as noted

All Consumers	Mean	Median
Total	**6,393**	**852**
Excluding large-value cash holdings	*6,109*	*806*
Cash holdings	**364**	**54**
On person	71	25
On property	293	5
Excluding large-value holdings*	202	52
On person	66	24
On property	137	4
Checking account balances	**6,007**	**675**
Primary checking account	4,034	492
Secondary checking account	1,973	0

Checking Account Adopters Only†	Mean	Median
Total	**7,003**	**1,093**
Excluding large-value cash holdings	*6,692*	*1,051*
Checking account balances	**6,792**	**998**
Primary checking account	4,561	699
Secondary checking account	5,687	784

* Large value holdings are values greater than the 98th percentile of all observations. Estimates are for the sub-sample of respondents with total cash holdings of less than or equal to the 98th percentile. Large value holdings cut-offs are approximately $2,300 in 2015.

† Measured cash adoption is essentially 100%. Therefore, these tables do not report cash adopters separately.

Notes: 2, 3.

Table 17

Cash Holdings, by Adoption of Deposit Accounts and Payment Instruments

Dollars per consumer*†

Adopters	Mean	Median
Deposit account	**216**	**59**
On person	69	25
On property	148	5
ATM or debit card	**211**	**55**
On person	66	25
On property	145	5
Credit card	**240**	**75**
On person	74	29
On property	167	9
Prepaid card	**219**	**59**
On person	76	28
On property	144	8
Money order	**174**	**39**
On person	64	23
On property	110	0

Nonadopters	Mean	Median
Deposit account	**46**	**5**
On person	36	4
On property	11	0
ATM or debit card	**136**	**25**
On person	66	23
On property	70	0
Credit card	**80**	**19**
On person	40	10
On property	39	0
Prepaid card	**181**	**43**
On person	51	21
On property	130	0
Money order	**211**	**59**
On person	65	25
On property	146	8

* "On person" is defined as cash held in the respondent's wallet, purse, and/or pocket. "On property" is defined as cash held elsewhere by the respondent (in the respondent's home, car, office, etc.) instead of on person.

† Excluding large value holdings. See Table 14 for definition of large value holdings.

Notes: 2, 3, 5.

Table 18

Cash Withdrawals, Total and at Most Frequented Location

Dollars per consumer per location, except as noted*

Total, per month	Mean‡	Median
Cash withdrawals†	—	**238**
Amount per withdrawal	115	60
Withdrawals (number per month)	—	3.3
Most frequented location	—	**179**
Amount per withdrawal	115	57
Withdrawals (number per month)	—	2.0
All other locations	—	**0**
Amount per withdrawal	39	0
Withdrawals (number per month)	—	0.0

At Most Frequented Location, per month	Mean	Median
ATM	—	**200**
Amount per withdrawal	105	59
Withdrawals (number per month)	—	2.0
Bank teller	—	**200**
Amount per withdrawal	186	97
Withdrawals (number per month)	—	1.5
Check cashing store	**s**	**s**
Amount per withdrawal	s	s
Withdrawals (number per month)	s	s
Retail or grocery store	—	**79**
Amount per withdrawal	36	20
Withdrawals (number per month)	—	1.9
Employer	**s**	**s**
Amount per withdrawal	s	s
Withdrawals (number per month)	s	s
Family or friend	—	**35**
Amount per withdrawal	45	18
Withdrawals (number per month)	—	1.7
Other	—	**229**
Amount per withdrawal	183	97
Withdrawals (number per month)	—	1.9

* The amount for each location is the dollar amount of withdrawals at that location only by consumers who named that location as their most frequent location. Amount withdrawn per month is obtained from the amount per withdrawal times the number of withdrawals, calculated for each consumer.

† *Cash withdrawals per month* is the withdrawal-weighted average of typical amounts per withdrawal from the primary and all other locations.

‡ The missing values in the "Mean" column are due to the fact that the data quality of the frequency of withdrawal numbers is suspect. Refer to the Technical Appendix for detail.

Notes: 2, 3, 11.

Table 19

Cash Withdrawal Preferences, by Location and Method

Percentage of consumers

Share of Consumers Making a Cash Withdrawal*	
Monthly	—
Annually	—
Most Frequented Location	
ATM	52.7
Bank teller	19.9
Check cashing store	1.0
Retail or grocery store	14.2
Employer	3.0
Family or friend	5.4
Payday lender	0.3
Other	3.5

* The missing values in the "Share of Consumers Making a Cash Withdrawal" section are due to the fact that the data quality of the frequency of withdrawal numbers is suspect. Refer to the Technical Appendix for detail.

Notes: 2.

Table 20

Total Cash Withdrawals, by Adoption of Deposit Accounts and Payment Instrument
Dollars per consumer per location, except as noted*

Adopters, per month	Mean†	Median
Deposit account‡	—	**217**
Amount per withdrawal	115	60
Withdrawals (number per month)	—	3.1
ATM or debit card	—	**214**
Amount per withdrawal	108	60
Withdrawals (number per month)	—	3.4
Credit card	—	**212**
Amount per withdrawal	120	60
Withdrawals (number per month)	—	3.0
Prepaid card	—	**254**
Amount per withdrawal	115	60
Withdrawals (number per month)	—	4.0
Money order	—	**435**
Amount per withdrawal	126	71
Withdrawals (number per month)	—	4.3

Nonadopters, per month	Mean	Median
Deposit account	—	**400**
Amount per withdrawal	115	63
Withdrawals (number per month)	—	4.1
ATM or debit card	—	**308**
Amount per withdrawal	163	100
Withdrawals (number per month)	—	3.0
Credit card	—	**348**
Amount per withdrawal	97	44
Withdrawals (number per month)	—	4.3
Prepaid card	—	**200**
Amount per withdrawal	114	59
Withdrawals (number per month)	—	3.0
Money order	—	**200**
Amount per withdrawal	112	60
Withdrawals (number per month)	—	3.0

* Amount withdrawn per month is obtained from the amount per withdrawal times the number of withdrawals, calculated for each consumer.

† The missing values in the "Mean" column are due to the fact that the data quality of the frequency of withdrawal numbers is suspect. Refer to the Technical Appendix for detail.

‡ The unit for the bold rows is "dollar amount per month".

Notes: 2, 3, 5.

Table 21

Share of Consumers or Adopters Using Nonbank Services

Percentage of consumers or adopters

Percentage of consumers	
Nonbank payment accounts*	**35.8**
Amazon Payments	5.4
Google Wallet	2.5
PayPal	32.3
Underbanked financial services†	**—**
Non-bank money order/cashier's check, check cashing, remittance, payday loan	—
Pawn shop, rent-to-own services, tax refund anticipation loan	—
Percentage of nonbank payment account adopters	
Nonbank payment accounts	**73.3**
Amazon Payments	11.1
Google Wallet	5.1
PayPal	66.2
Percentage of bank account adopters	
Underbanked financial services‡	**22.1**
Payment services	18.1
Money order or cashiers check	16.9
Check cashing	3.8
Remittance	0.3
Financing	6.9
Payday loan	3.6
Selling an item at a pawn shop	2.3
Rent-to-own services	1.7
Tax refund anticipation loan	0.9

* Use data was not collected for the other mobile apps or online accounts listed in Table 4, due to low adoption rates and limited survey time.

† Underbanked is not displayed in the "Percentage of consumers" panel because to be underbanked, one must have a bank account. Therefore, it is only a valid measurement of consumers who have adopted bank accounts.

‡ "Underbanked" is defined as having a bank account and doing one of the actions listed in the past 12 months. These actions are based on the FDIC definition of underbanked consumers.

Notes: 1, 2.

Table 22

Share of Consumers Using Payment Instruments, by Type of Asset or Liability
Percentage of consumers

	Monthly	Annual
Assets	**96.9**	**96.9**
Money (M1)*	**96.9**	**96.9**
Cash (currency)	85.7	88.6
Traveler's check	—	0.6
Demand deposit accounts, consumer	87.5	87.8
Checks	56.2	64.2
Certified	—	12.3
Debit card	65.4	67.3
Online banking bill payment	32.7	34.8
Bank account number payment	60.2	66.0
Other deposit accounts, bank	—	9.9
Cashier's check	—	9.9
Private currency	**0.2**	**0.2**
Bitcoin	0.0	0.0
Other kinds of virtual currency	0.2	0.2
Unknown asset type†	**19.9**	**25.2**
Money order	8.5	11.0
Prepaid card	13.2	17.2
Liabilities	**59.7**	**66.9**
Credit or charge card	59.7	63.2
Credit	—	—
Charge	—	—
Text/SMS mobile payment	—	5.1
Other means of payment	**15.3**	**15.8**
Direct deduction from income	15.3	15.8

* For official definition of M1, see Federal Reserve Statistical Release H.6.

† These types are "unknown" because it is unknown if the underlying funds are held in a deposit account or not.

Notes: 1, 2, 5.

Table 23a

Share of Consumers Using Payment Instruments and Other Means of Payment
Percentage of consumers

	Monthly	Annual
Paper instruments	**91.2**	**93.1**
Cash	85.7	88.6
Check	56.2	64.2
Certified check	—	12.3
Money order	8.5	11.0
Traveler's check	—	0.6
Cashier's check	—	9.9
Payment cards	**87.6**	**88.9**
Debit	65.4	67.3
Credit or charge	59.7	63.2
Prepaid	13.2	17.2
Electronic payments	**69.5**	**72.7**
Online banking bill payment	32.7	34.8
Bank account number payment	60.2	66.0
Unknown/unspecified instrument	—	**23.3**
Mobile payments	—	23.3
Text message payment	—	5.1
Tap phone and pay at point of sale	—	8.0
Scanned QR code or showed phone to pay	—	9.9
Used mobile app while not at point of sale	—	13.2
Other means of payment	**15.3**	**15.8**
Direct deduction from income	15.3	15.8

Notes: 1, 2.

Table 23b

Share of Adopters Using Payment Instruments and Other Means of Payment
Percentage of adopters*

	Monthly	Annual
Paper instruments	**91.8**	**93.4**
Cash	86.3	89.2
Check	68.9	78.7
Certified check	—	—
Money order	43.0	55.3
Traveler's check	—	—
Cashier's check	—	—
Payment cards	**91.7**	**93.1**
Debit	82.3	84.7
Credit or charge	78.3	82.7
Prepaid	21.9	28.6
Electronic payments	**90.6**	**94.8**
Online banking bill payment	67.5	71.7
Bank account number payment†	91.2	100.0
Unknown/unspecified instrument	—	—
Mobile payments†	—	100.0
Text/SMS	—	21.9
Contactless	—	34.2
Scanned a barcode	—	42.5
Used a mobile app	—	56.7
Other means of payment		
Direct deduction from income†	97.0	100.0

* Each payment instrument uses adopters of that particular payment instrument as the denominator. For example, in 2015, 86.3 percent of cash adopters use cash in a typical month.

† Estimates are 100 percent whenever adoption is defined solely as annual incidence of use, as for mobile payments. Shares using for each type of mobile payment are calculated as the share of all consumers using any type of mobile payment who use that particular type.

Notes: 1, 2, 5.

Table 24

Share of Consumers Making a Transaction, by Type of Transaction

Percentage of consumers

	Monthly	Annual
Any transaction	**97.2**	**97.2**
Online or electronic	87.5	89.0
By mail, in person, or by phone	96.5	96.7
Bill payments	**93.0**	**93.4**
Automatic	60.6	60.7
Direct deduction from income	15.3	15.8
Online	72.3	74.9
By mail, in person, or by phone	74.8	79.8
Nonbill payments	**96.2**	**96.3**
Online or electronic	54.3	65.4
By mail, in person, or by phone	95.8	96.2
Retail goods	92.6	93.2
Services	89.8	91.8
Person to person	48.0	62.4
Online or electronic	16.4	23.7
By mail, in person, or by phone	41.4	56.4

Notes: 2.

Table 25

Share of Consumers Using Payment Instrument, by Type of Transaction

Percentage of consumers

Monthly	Bill payments	Nonbill payments	
		Online	Not online*
Paper instruments	**64.7**	**15.6**	**86.8**
Cash	29.2	—	84.2
Check	46.1	14.2	30.1
Money order	7.6	2.4	3.0
Traveler's check	—	—	—
Payment cards	**72.4**	**46.2**	**84.0**
Debit	49.8	26.3	60.9
Credit or charge	40.4	27.7	54.0
Prepaid	5.3	4.3	10.3
Electronic payments	**65.9**	**15.0**	**12.7**
Online banking bill payment	32.1	—	4.9
Bank account number payment	55.1	15.0	9.7
Other means of payment	**15.3**	—	—
Direct deduction from income	15.3	—	—

Annual	Bill payments	Nonbill payments	
		Online	Not online*
Paper instruments	**72.5**	**23.3**	**89.7**
Cash	33.1	—	87.3
Check	54.1	21.2	40.3
Money order	9.4	3.9	4.1
Traveler's check	—	—	—
Payment cards	**74.9**	**57.6**	**84.7**
Debit	52.5	34.1	62.4
Credit or charge	45.1	37.1	57.5
Prepaid	8.1	6.5	13.1
Electronic payments	**68.6**	**20.5**	**18.7**
Online banking bill payment	33.8	—	7.2
Bank account number payment	59.5	20.5	14.8
Other means of payment	**15.8**	—	—
Direct deduction from income	15.8	—	—

* *Not online* refers to retail goods payments, payments for services, and person-to-person payments.

Notes: 1, 2.

Table 26

Share of Consumers Using Payment Instrument, by Type of Bill Payment

Percentage of consumers

Monthly	Automatic	Online	By mail or in person
Any instrument	**60.6**	**72.3**	**74.8**
Paper instruments	—	—	**64.7**
Cash	—	—	29.2
Check	—	—	46.1
Money order	—	—	7.6
Traveler's check	—	—	—
Payment cards	**44.6**	**52.9**	**41.5**
Debit	28.0	35.8	29.4
Credit or charge	26.8	26.0	19.2
Prepaid	—	—	3.4
Electronic payments	**49.5**	**51.7**	—
Online banking bill payment	23.3	25.8	—
Bank account number payment	40.4	38.4	—
Other means of payment	**15.3**	—	—
Direct deduction from income	15.3	—	—

Annual	Automatic	Online	By mail or in person
Any instrument	**60.7**	**74.9**	**79.8**
Paper instruments	—	—	**72.5**
Cash	—	—	33.1
Check	—	—	54.1
Money order	—	—	9.4
Traveler's check	—	—	—
Payment cards	**45.6**	**56.2**	**46.5**
Debit	28.9	38.4	32.9
Credit or charge	28.7	30.7	23.3
Prepaid	—	—	5.1
Electronic payments	**50.0**	**55.6**	—
Online banking bill payment	23.8	27.9	—
Bank account number payment	42.2	43.5	—
Other means of payment	**15.8**	—	—
Direct deduction from income	15.8	—	—

Notes: 1, 2.

Table 27

Share of Consumers Using Payment Instrument, by Type of Nonbill, In-Person Transactions

Percentage of consumers

Monthly	Retail	Services and other	Person to person
Any instrument	**92.6**	**89.8**	**48.0**
Paper instruments	**75.1**	**70.9**	**41.4**
Cash	73.1	67.2	35.3
Check	15.9	19.6	11.7
Money order	1.5	1.7	1.6
Traveler's check	—	—	—
Payment cards	**79.8**	**75.5**	**7.6**
Debit	57.8	51.4	5.2
Credit or charge	48.4	45.5	3.9
Prepaid	9.2	6.1	—
Electronic payments	—	—	**12.7**
Online banking bill payment	—	—	4.9
Bank account number payment	—	—	9.7
Other means of payment	—	—	—
Direct deduction from income	—	—	—

Annual	Retail	Services and other	Person to person
Any instrument	**93.2**	**91.8**	**62.4**
Paper instruments	**78.6**	**77.3**	**56.4**
Cash	76.9	73.4	49.6
Check	21.4	27.1	23.5
Money order	2.0	2.3	2.4
Traveler's check	—	—	—
Payment cards	**80.3**	**78.2**	**11.2**
Debit	59.3	53.8	8.2
Credit or charge	51.4	50.9	6.3
Prepaid	11.3	8.4	—
Electronic payments	—	—	**18.7**
Online banking bill payment	—	—	7.2
Bank account number payment	—	—	14.8
Other means of payment	—	—	—
Direct deduction from income	—	—	—

Notes: 1, 2.

Table 28a

Number of Consumer Payments in a Typical Month, by Type of Asset or Liability

Number per consumer

	Mean
Total payments	**68.9**
Assets	**53.7**
Money (M1)*	**52.1**
Cash (currency)	18.6
Traveler's check	—
Demand deposit accounts, consumer	33.5
Checks	4.5
Certified	—
Debit card	22.4
Online banking bill payment	2.8
Bank account number payment	3.8
Other deposit accounts	—
Cashier's check	—
Private currency	—
Bitcoin	—
Other kinds of virtual currency	—
Unknown asset type†	**1.5**
Money order	0.4
Prepaid card	1.1
Prepaid card, per adopter‡	1.8
Liabilities	**14.6**
Credit or charge card	14.6
Credit	—
Charge	—
Text/SMS mobile payment	—
Other means of payment	**0.6**
Direct deduction from income	0.6

* For official definition of M1, see Federal Reserve Statistical Release H.6.

† These types are "unknown" because it is unknown if the underlying funds are held in a deposit account or not.

‡ Estimates are calculated using only adopters of a payment instrument, not all consumers.

Notes: 1, 2.

Table 28b

Percentage Share of Consumer Payments in a Typical Month, by Type of Asset or Liability
Percentage per consumer

	Share (%)
Total payments	**100.0**
Assets	**77.9**
Money (M1)*	**75.7**
Cash (currency)	27.1
Traveler's check	—
Demand deposit accounts, consumer	48.7
Checks	6.5
Certified	—
Debit card	32.5
Online banking bill payment	4.1
Bank account number payment	5.6
Other deposit accounts	—
Cashier's check	—
Private currency	—
Bitcoin	—
Other kinds of virtual currency	—
Unknown asset type†	**2.2**
Money order	0.6
Prepaid card	1.6
Prepaid card, per adopter‡	—
Liabilities	**21.3**
Credit or charge card	21.3
Credit	—
Charge	—
Text/SMS mobile payment	—
Other means of payment	**0.8**
Direct deduction from income	0.8

* For official definition of M1, see Federal Reserve Statistical Release H.6.

† These types are "unknown" because it is unknown if the underlying funds are held in a deposit account or not.

‡ Estimates are calculated using only adopters of a payment instrument, not all consumers.

Notes: 1, 2.

Table 29

Consumer Payments in a Typical Month, by Payment Instrument

Number per consumer	Mean
Total payments	**68.9**
Paper instruments	**23.6**
Cash	18.6
Check	4.5
Money order	0.4
Traveler's check	—
Payment cards	**38.1**
Debit	22.4
Credit or charge	14.6
Prepaid	1.1
Electronic payments	**6.6**
Online banking bill payment	2.8
Bank account number payment	3.8
Other means of payment	**0.6**
Direct deduction from income	0.6

Percentage share	Share (%)
Total payments	**100.0**
Paper instruments	**34.2**
Cash	27.1
Check	6.5
Money order	0.6
Traveler's check	—
Payment cards	**55.4**
Debit	32.5
Credit or charge	21.3
Prepaid	1.6
Electronic payments	**9.6**
Online banking bill payment	4.1
Bank account number payment	5.6
Other means of payment	**0.8**
Direct deduction from income	0.8

* Estimates are calculated using only adopters of a payment instrument, not all consumers.

Notes: 1, 2.

Table 30

Consumer Payments in a Typical Month, by Type of Payment Transaction

Number per consumer	Mean
Total	**68.9**
Online or electronic	18.7
By mail, in person, or by phone	50.1
Bill payments	**20.6**
Automatic	6.8
Direct deduction from income	0.6
Other automatic	6.2
Online	6.5
By mail, in person, or by phone	7.4
Nonbill payments	**48.3**
Retail and services	45.3
Online or electronic	4.7
By mail, in person, or by phone	40.6
Retail goods	23.6
Services	17.0
Person to person	3.0
Online or electronic	0.9
By mail, in person, or by phone	2.1

Percentage share	Share (%)
Total	**100.0**
Online or electronic	27.2
By mail, in person, or by phone	72.8
Bill payments	**29.9**
Automatic	9.8
Direct deduction from income	0.8
Other automatic	9.0
Online	9.4
By mail, in person, or by phone	10.7
Nonbill Payments	**70.1**
Retail and services	65.8
Online or electronic	6.8
By mail, in person, or by phone	59.0
Retail goods	34.3
Services	24.7
Person to person	4.3
Online or electronic	1.2
By mail, in person, or by phone	3.1

Notes: 1, 2.

Table 31

Use of Payment Instruments in a Typical Month, by Type of Transaction

Number per consumer	Bill payments	Nonbill payments	
		Online	Not online*
Paper instruments	**4.2**	**0.7**	**18.7**
Cash	2.1	—	16.5
Check	1.9	0.6	2.0
Money order	0.2	0.1	0.1
Traveler's check	—	—	—
Payment cards	**10.3**	**3.4**	**24.5**
Debit	6.3	1.8	14.2
Credit or charge	3.6	1.3	9.7
Prepaid	0.3	0.3	0.6
Electronic payments	**5.6**	**0.6**	**0.5**
Online banking bill payment	2.6	—	0.2
Bank account number payment	3.0	0.6	0.3
Other methods of payment	**0.6**	—	—
Direct deduction from income	0.6	—	—

Percentage share of all payments	Bill payments	Nonbill payments	
		Online	Not online*
Paper instruments	**6.1**	**1.0**	**27.1**
Cash	3.1	—	24.0
Check	2.7	0.9	2.9
Money order	0.3	0.1	0.2
Traveler's check	—	—	—
Payment cards	**14.9**	**5.0**	**35.6**
Debit	9.2	2.7	20.7
Credit or charge	5.3	1.9	14.1
Prepaid	0.4	0.4	0.8
Electronic payments	**8.1**	**0.9**	**0.7**
Online banking bill payment	3.8	—	0.3
Bank account number payment	4.3	0.9	0.4
Other methods of payment	**0.8**	—	—
Direct deduction from income	0.8	—	—

* *Not online* refers to retail goods payments, payments for services, and person-to-person payments.

Notes: 1, 2.

Table 32

Use of Payment Instruments in a Typical Month, by Type of Bill Payment

Number per consumer	Automatic	Online	By mail, in person, or by phone
Paper instruments	—	—	**4.2**
Cash	—	—	2.1
Check	—	—	1.9
Money order	—	—	0.2
Traveler's check	—	—	—
Payment cards	**3.7**	**3.4**	**3.2**
Debit	2.2	2.1	2.1
Credit or charge	1.4	1.2	1.0
Prepaid	—	—	0.1
Electronic payments	**2.5**	**3.1**	**—**
Online banking bill payment	1.1	1.5	—
Bank account number payment	1.4	1.6	—
Other means of payment	**0.6**	**—**	**—**
Direct deduction from income	0.6	—	—

Percentage share of all payments	Automatic	Online	By mail, in person, or by phone
Paper instruments	—	—	**6.1**
Cash	—	—	3.1
Check	—	—	2.7
Money order	—	—	0.3
Traveler's check	—	—	—
Payment cards	**5.4**	**4.9**	**4.6**
Debit	3.1	3.1	3.0
Credit or charge	2.1	1.7	1.4
Prepaid	—	—	0.2
Electronic payments	**3.6**	**4.4**	**—**
Online banking bill payment	1.6	2.2	—
Bank account number payment	2.0	2.3	—
Other means of payment	**0.8**	**—**	**—**
Direct deduction from income	0.8	—	—

Notes: 1, 2.

Table 33

Use of Payment Instruments in a Typical Month, by Type of Nonbill, In-Person Transactions

Number per consumer	Retail	Services and other	Person to person
Paper instruments	**9.6**	**7.0**	**2.1**
Cash	8.6	6.1	1.7
Check	0.9	0.8	0.3
Money order	0.1	0.0	0.1
Traveler's check	—	—	—
Payment cards	**14.0**	**10.1**	**0.4**
Debit	8.2	5.7	0.2
Credit or charge	5.4	4.1	0.1
Prepaid	0.4	0.2	—
Electronic payments	—	—	**0.5**
Online banking bill payment	—	—	0.2
Bank account number payment	—	—	0.3
Other means of payment	—	—	—
Direct deduction from income	—	—	—

Percentage share of all payments	Retail	Services and other	Person to person
Paper instruments	**13.9**	**10.1**	**3.1**
Cash	12.5	8.9	2.5
Check	1.3	1.2	0.5
Money order	0.1	0.1	0.1
Traveler's check	—	—	—
Payment cards	**20.4**	**14.6**	**0.5**
Debit	12.0	8.3	0.4
Credit or charge	7.9	6.0	0.2
Prepaid	0.5	0.3	—
Electronic payments	—	—	**0.7**
Online banking bill payment	—	—	0.3
Bank account number payment	—	—	0.4
Other means of payment	—	—	—
Direct deduction from income	—	—	—

Notes: 1, 2.

Table 34

Payment Instruments Used in a Typical Period, by Type of Instrument and Transaction

Mean number per consumer

Month	
All payments (9 instruments available)	**3.8**
Paper instruments	1.5
Payment cards	1.4
Electronic payments	0.9
Bill payments (8 instruments available)†	**2.7**
Paper instruments	0.8
Payment cards	1.0
Electronic payments	0.9
Online, non-bill payments (6 instruments available)‡	**0.9**
Paper instruments	0.2
Payment cards	0.6
Electronic payments	0.2
In-person payments (8 instruments available)**	**2.6**
Paper instruments	1.2
Payment cards	1.3
Electronic payments	0.1
Year	
All payments (9 instruments available)	**4.1**
Paper instruments	1.6
Payment cards	1.5
Electronic payments	1.0
Bill payments (8 instruments available)†	**3.0**
Paper instruments	1.0
Payment cards	1.1
Electronic payments	0.9
Online, non-bill payments (6 instruments available)‡	**1.2**
Paper instruments	0.3
Payment cards	0.8
Electronic payments	0.2
In-person payments (8 instruments available)**	**2.9**
Paper instruments	1.3
Payment cards	1.3
Electronic payments	0.2

† Traveler's checks are not presented to the respondent as an option for bill payments.

‡ Cash, traveler's check, and OBBP are not presented to the respondent as an option for online payments.

** OBBP is not presented to the respondent as a payment instrument for in-person payments.

Notes: 2, 4.

Table 35

Loss, Theft, or Fraudulent Use of Payment Instrument
Percentage of consumers or adopters and mean dollar value

Percentage of consumers	
Incidence in past 12 months	**15.1**
Cash	9.1
Checks	0.8
Credit card	4.4
Debit card	4.7
Incidence of identity theft	**23.5**
Myself and someone I know well	5.9
Someone I know well only	11.7
Myself only	5.8
Percentage of adopters	
Incidence in past 12 months	**15.2**
Cash	9.2
Checks	0.9
Credit card	5.7
Debit card	5.8
Mean dollar value*	
Amount lost or stolen	
Cash	153
Amount of fraudulent charges†	
Checks	s
Credit card	561
Debit card	283

* For each payment instrument listed, the value is the average amount for all consumers who experienced loss, theft, or fraud of that instrument over the past 12 months.

† The amount of fraudulent charges may not be the actual amount of the loss borne by consumers. Actual consumer loss depends on the policies of depository institutions and card network agreements.

Notes: 2, 3, 11.

Table 36a

Assessments of Payment Instruments: Acceptance for Payment

Percentage of consumers

	Rarely accepted	Occasionally accepted	Often accepted	Usually accepted	Almost always accepted
Cash	3.3	2.6	8.4	14.7	71.0
Check	6.3	16.5	25.6	29.7	21.8
Money order	13.6	22.8	21.8	20.3	21.5
Debit card	2.3	1.8	8.7	24.7	62.4
Credit card	2.3	1.4	6.9	23.5	65.9
Prepaid card	3.7	5.4	19.4	29.0	42.5
Bank account number payment	27.0	19.6	19.5	17.0	16.9
Online banking bill payment	11.0	12.2	22.8	26.0	28.0

Notes: 2.

Table 36b

Assessments of Payment Instruments: Acquisition and Setup

Percentage of consumers

	Very hard to get or set up	Hard to get or set up	Neither hard nor easy	Easy to get or set up	Very easy to get or set up
Cash	2.8	3.3	19.5	19.8	54.5
Check	2.6	8.5	26.2	34.4	28.3
Money order	8.5	21.7	30.7	23.0	16.2
Debit card	2.0	6.4	21.2	37.3	33.1
Credit card	4.3	9.3	20.7	35.5	30.2
Prepaid card	3.7	9.8	35.0	29.0	22.5
Bank account number payment	3.3	13.6	31.2	31.9	20.0
Online banking bill payment	3.7	14.5	26.2	34.9	20.7

Notes: 2.

Table 36c

Assessments of Payment Instruments: Convenience

Percentage of consumers

	Very inconvenient	Inconvenient	Neither inconvenient nor convenient	Convenient	Very convenient
Cash	5.5	9.2	14.7	25.8	44.9
Check	9.3	22.7	23.3	26.4	18.2
Money order	27.2	29.7	22.5	13.3	7.2
Debit card	3.5	2.1	10.1	30.2	54.1
Credit card	4.6	1.4	8.9	27.6	57.5
Prepaid card	8.0	11.2	24.8	30.6	25.4
Bank account number payment	10.3	18.7	24.9	26.6	19.5
Online banking bill payment	5.1	6.6	19.5	30.4	38.4

Notes: 2.

Table 36d

Assessments of Payment Instruments: Cost

Percentage of consumers

	Very high cost	High cost	Neither high nor low cost	Low cost	Very low cost
Cash	2.3	2.7	22.4	10.6	62.2
Check	4.1	9.1	23.0	32.9	30.9
Money order	6.4	24.8	25.2	32.4	11.2
Debit card	4.0	7.7	23.3	25.4	39.7
Credit card	15.2	29.5	18.4	16.1	20.8
Prepaid card	5.1	15.7	33.5	22.3	23.4
Bank account number payment	3.5	5.2	29.8	21.6	39.8
Online banking bill payment	3.1	5.4	27.0	20.1	44.4

Notes: 2.

Table 36e

Assessments of Payment Instruments: Payment Records

Percentage of consumers

	Very poor records	Poor records	Neither good nor poor	Good records	Very good records
Cash	34.3	21.8	19.1	12.6	12.1
Check	2.8	5.3	14.0	42.4	35.5
Money order	15.0	18.3	30.2	25.2	11.3
Debit card	2.2	2.1	12.8	37.5	45.5
Credit card	2.3	1.5	9.6	35.6	51.0
Prepaid card	14.4	18.5	34.6	21.3	11.1
Bank account number payment	3.5	2.7	16.4	36.1	41.3
Online banking bill payment	3.3	2.1	16.1	33.9	44.6

Notes: 2.

Table 36f

Assessments of Payment Instruments: Security

Percentage of consumers

	Very risky	Risky	Neither risky nor secure	Secure	Very secure
Cash	38.6	13.9	14.3	12.1	21.1
Check	13.2	31.3	24.5	23.5	7.6
Money order	14.2	21.0	25.4	25.5	14.0
Debit card	17.9	27.7	13.7	30.5	10.2
Credit card	16.3	22.8	14.2	32.0	14.7
Prepaid card	21.4	22.6	28.3	19.1	8.6
Bank account number payment	24.8	29.1	14.5	23.4	8.2
Online banking bill payment	16.7	22.9	17.0	32.2	11.2

Notes: 2.

Table 37a
Assessment of Debit Authorization Mode
Percentage of consumers

Security	Very risky	Risky	Neither risky nor secure	Secure	Very secure
PIN debit card.....	7.3	20.0	14.6	44.2	13.9
Signature debit card.....	6.0	29.2	23.1	32.7	9.0
No PIN and no signature debit card.....	43.2	35.6	12.3	5.7	3.1
Using a debit card online.....	20.1	40.2	19.7	16.8	3.1
Using a debit card during a voice call.....	31.5	40.6	15.3	10.6	2.1
Using a debit card with a mobile app.....	24.0	40.3	18.3	14.9	2.4

Notes: 2.

Table 37b

Preferred Way of Authorizing Debit Card Payments

Percentage of consumers

PIN	53.4
Signature	18.8
Either one is fine/I'm indifferent	24.7
Neither one/ I prefer not to enter a PIN or give my signature	3.1

Notes: 1, 2.

Table 38

Demographics: Gender, Age, Race, Ethnicity, and Education
Percentage of consumers, except where noted*

U.S. Population age 18 + older (millions)†	242.6
Number of survey respondents ‡	1,429
Gender	
Male	48.2
Female	51.8
Age	
18–24	6.7
25–34	23.3
35–44	16.4
45–54	17.7
55–64	16.7
65 and older	19.2
Race	
White	76.3
Black	13.2
Asian	4.1
Other	1.7
Ethnicity	
Hispanic or Latino	13.2
Education	
No high school diploma	9.0
High school	32.8
Some college	28.3
College	17.0
Post-graduate study	13.0

* Estimates are weighted. The table of unweighted sample demographics is available upon request.

† Source: Haver Analytics. October estimate, Civilian Noninstitutional Population by Sex and Age

‡ All estimates in this document use the Understanding America Study sample, which has 1,429 observations. Those 1,429 observations are split betwen 1,349 observations from the UAS Nationally Representative sample and 80 observations from the UAS Native American sample. The entire 2015 SCPC dataset has 1,933 total observations; 1,429 from the UAS samples, and 504 from GfK.

Notes: 2.

Table 39

Income and Labor Force Status

Percentage of consumers*

Household income	
Less than $25,000	21.8
$25,000–$49,999	24.1
$50,000–$74,999	19.2
$75,000–$99,999	11.7
$100,000–$124,999	8.6
$125,000 or more	14.7
$125,000–$199,999	11.0
$200,000–$499,999	2.8
$500,000 or more	0.9
Respondent income	
Highest in household	50.8
About equal with highest	14.4
2nd highest	23.9
3rd highest or lower	10.9
Labor force status	
Currently working	58.8
On sick or other leave	0.6
Unemployed – on layoff†	0.8
Unemployed – looking	6.1
Retired	15.5
Disabled	6.8
Other	4.4
Selected multiple categories	6.9

* Estimates are weighted. The table of unweighted sample demographics is available upon request.

† The numbers for unemployment differ from the official BLS numbers because of differences between the UAS panel and the BLS in the methodologies for collecting the data and computing the unemployment rate.

Notes: 2, 3.

Table 40

Consumers' Financial Responsibility in the Household

Percentage of consumers

	None	Some	Shared equally	Most	All
Bill payment.....	14.0	10.2	15.0	8.2	52.6
Shopping.....	8.2	16.6	20.6	13.3	41.2
Saving and investing.....	11.0	7.8	31.0	12.9	37.2
Other.....	10.5	9.3	26.9	13.2	40.1

Notes: 1, 2.

Table 41

Selected Assets and Liabilities

Percentage of consumers or dollars per consumer, unless otherwise noted

Home ownership rate (percentage of consumers)	61.9
Credit card limits	
Mean credit card limit (dollars)	
Per consumer	15,019
Per credit card adopter	19,596
Per adopter with unpaid balance	17,934
Median credit card limit (dollars)	
Per consumer	5,910
Per credit card adopter	9,861
Per adopter with unpaid balance	9,721
Credit card debt	
Carried unpaid balance at any time during the past 12 months (percentage of credit card adopters)	59.0
Carried unpaid balance last month (percentage of credit card adopters)	53.3
Mean credit card balance unpaid, previous month (dollars)	
Per consumer	2,172
Per credit card adopter	2,840
Per adopter with unpaid balance	4,816
Median credit card balance unpaid, previous month (dollars)	
Per consumer	0
Per credit card adopter	186
Per adopter with unpaid balance	1,492
Change in unpaid balance since a year ago (percentage of credit card revolvers)	
Much lower	18.4
Lower	22.1
About the same	24.6
Higher	26.8
Much higher	8.1

Notes: 1–3.