

The 2010 Survey of Consumer Payment Choice

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Abstract:

In 2010, the number of consumer payments increased nearly 9 percent from 2009 as economic activity began to rebound from the financial crisis and recession. Cash payments by consumers, which had increased sharply in 2009, did not fall back but rather grew another 3 percent in 2010. However, the share of cash payments, the dollar amount of cash withdrawals, and cash holdings by consumers decreased moderately in 2010. Credit card payments by consumers increased 15 percent, reversing more than half the 2009 decline, and the steady trend decline in paper check payments by consumers continued. Debit cards and cash continued to account for the two largest shares of consumer payments (31.1 and 28.6 percent, respectively), and consumer adoption of all types of prepaid cards (38.2 percent) increased notably in 2010. Mobile banking and mobile payments by consumers continued to show moderate increases through the end of 2010, consistent with early stages of technology adoption. The 2010 SCPC contains new results that may help researchers and policymakers identify potential indirect effects of Regulation II (Durbin Amendment) on consumers and may help to inform the Federal Reserve's new strategic plan for the payment system.

JEL Classifications: D12, D14, E42

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Complete and detailed acknowledgments appear on the first page of this report. The primary authors are responsible for any errors that may remain.

The views expressed in this paper are those of the authors and the Federal Reserve Bank of Boston. They do not necessarily represent the views of the other Federal Reserve Banks or the Board of Governors of the Federal Reserve System.

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I. Introduction

The 2010 Survey of Consumer Payment Choice (SCPC) is the third in a series of annual studies (2008–2010) 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 43 tables with detailed estimates of the rates of adoption, shares of consumers using, and number of payments made by consumers for nine common payment instruments—cash, checks, money orders, traveler’s checks, debit cards, credit cards, prepaid cards, online banking bill payments (OBBP), and bank account number payments (BANP)—plus payments made directly from consumers’ income source. 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.

In 2010, the number of consumer payments rebounded as the economy began to emerge from the financial crisis and recession. The large increase in consumers’ use of cash in 2009, documented in Foster, Meier, Schuh, and Zabek (2011), generally was not reversed in 2010. The number of cash payments increased moderately, while the share of cash payments and most measures of cash holdings and withdrawals declined moderately. Consumers also increased their use of credit cards and bank account numbers (BANP) to make payments in 2010, with both methods recovering roughly half of their 2009 declines. Changes in other noncash consumer payments were relatively modest, even for prepaid cards, which experienced a large increase in the rate of adoption by consumers. Debit cards remained one of the two most popular consumer payment methods (31.1 percent of all payments; cash was 28.6 percent), and

¹ For detailed reports on earlier versions of the SCPC, see Foster, Meier, Schuh, and Zabek (2009, 2011).

adoption and use of debit cards increased. Consumer payments by check continued their long-run trend decline. Mobile banking and mobile payments by consumers continued to increase moderately through 2010, consistent with early stages of technology diffusion and confirmed by other, more recent data.

The 2010 SCPC provides results that may help to inform the assessment of the 2010 Dodd-Frank Act (DFA), which included new legislation pertaining to debit card interchange fees and routing. The so-called Durbin Amendment to DFA became Regulation II, which the Federal Reserve approved in July 2011 and implemented in October 2011.² In response to this development, the CPRC added new questions to the 2010 SCPC about consumer attitudes toward debit card authorization methods and security to help gauge the potential policy impact on consumer behavior. Reg II primarily affected financial institutions, payment card networks, and merchants; most consumers likely were unaware of the changes. However, consumers' debit card behavior may have been affected indirectly by Reg II because of differences in consumer attitudes toward authorization methods and security. If so, the new questions about these issues in 2010 (and subsequent surveys) may help researchers to identify any indirect impact.

The SCPC of 2010 (and other survey years) may provide useful data for at least two other recent proposed policies. One is the Federal Reserve's new strategic focus for financial services during the next decade, which was announced in October 2012 by the president of the Federal Reserve Bank of Cleveland (Pianalto 2012). An important element of the Fed's plan is to begin taking into account the preferences of end users, such as consumers, when making decisions about the payment system. A second policy is the Advanced Notice of Proposed Rulemaking on prepaid cards issued by the Consumer Financial Protection Bureau (CFPB) in

² See <http://www.federalreserve.gov/paymentsystems/regii-about.htm>.

May 2012, which “seeks input on how to ensure that consumers’ funds on prepaid cards are safe and that card terms and fees are transparent.”³ To determine consumer preferences toward prepaid cards and other payment instruments, it is necessary to have data on actual consumer payment choices as well as their attitudes toward payment instruments and practices, which are in the SCPC. A particular advantage of the SCPC data is the fact that it contains estimates for the same consumer over multiple years. This type of longitudinal panel of consumers’ data, which now extends to three years (2008–2010), offers unique information for researchers and policymakers.

As in prior years, the 2010 SCPC was developed by the Consumer Payments Research Center (CPRC) of the Boston Fed and implemented by the RAND Corporation as an online survey, using RAND’s American Life Panel.⁴ The 2010 SCPC had 2,102 respondents whose responses were weighted to represent all U.S. consumers ages 18 years and older. Of these respondents, 1,913 of them (91 percent) were also respondents to the 2009 SCPC, and 788 of respondents completed all three surveys since 2008. Both groups form valuable longitudinal panels for research on consumer payment choice. The survey was implemented in the fall of 2010, primarily in October. Also in October 2010, the CPRC teamed with representatives of the Federal Reserve Banks of Richmond and San Francisco to implement a pilot study version of a consumer payment diary to supplement the SCPC.⁵

The results of the 2010 SCPC reflect further modifications in the questionnaire and other aspects of survey methodology, introduced to improve the overall quality and measurement of

³ See <http://www.consumerfinance.gov/pressreleases/consumer-financial-protection-bureau-considers-rules-on-prepaid-cards/>.

⁴ In 2013, the American Life Panel became a joint venture between the RAND Corporation (Labor and Population Division) and the University of Southern California (Dornsife Center for Economic and Social Research).

⁵ The results of the pilot diary in 2010 and 2011 are not published because of their developmental stage and small sample sizes. An official version of the Diary of Consumer Payment Choice was implemented in October 2012 and the results are being prepared for publication.

consumer payment choices. To this end, the following revisions were made to the survey questionnaire:

- Questions were modified and added to improve measurement of mobile banking and mobile payments;
- New questions were added about the security and initiation of debit card payments;
- Two questions about consumer assessments of characteristics of payments that had been dropped in 2009 (record keeping and setup cost) were restored;
- An improved methodology was introduced for detecting and reducing online reporting errors.

Release of the 2010 SCPC results, along with revised data for 2008–2009, was delayed by complications associated with evaluating and cleaning the responses across time. Previously, the data evaluation and cleaning process was conducted on a year-by-year basis using largely subjective judgments. With the addition of a third year of data in 2010, however, it became possible to enhance the data analysis to include the time-series properties of the responses and develop more consistent, objective, rule-based, multi-year procedures for evaluating and cleaning the survey-response data. This task required extensive new research and innovation and was further complicated by changes to the survey questionnaire. Though these changes are valuable improvements to the measurement of consumer payment activity, the changes also make it more challenging to draw cross-year comparisons because of the difficulties inherent in separating effects of changes in the survey from the effects of changes in economic behavior. The investment in improving the analysis and cleaning the SCPC data in 2010 is expected to reduce the time it takes to process and publish SCPC results for 2011 and beyond.

All SCPC data are available free of charge to the public once the official results have been published, along with complete technical documentation. As with previously published results, the SCPC estimates for 2008–2010 reported here may be revised in the future due to additional process improvement and insights from new data in 2011 and beyond. The 2008–2010 estimates are not yet adjusted for seasonal variation, inflation, or item nonresponse

(missing values). The CPRC is conducting ongoing research to develop procedures for these kinds of adjustments for potential inclusion in future data releases.

The remainder of this paper comprises three parts: 1) a written summary of the key SCPC results; 2) a set of official tables containing most of the SCPC results; and 3) a set of tables containing the official definitions of important survey concepts. More details are available in a separate technical appendix by Angrisani, Foster, and Hitczenko (2013).

II. Concepts and Content

The main objective of the SCPC program is to measure U.S. consumer payments behavior. Broadly speaking, the SCPC asks consumers what payment accounts and instruments they have and how they use these accounts and instruments. The two main goals of the SCPC program are: 1) to provide aggregate data on trends in U.S. consumer payment choices; and 2) to provide a consumer-level database to support research on consumer payment choices.

Key Measurement Concepts

The reporting unit of the SCPC is an *individual* consumer in the U.S., age 18 or older. The primary reason is that it is costlier to obtain estimates for all consumers in a household and it is unlikely that a head of household can accurately track payments of all members, especially for cash. Consequently, the SCPC does not provide comprehensive estimates of the payment choices of *household* units. However, information about each reporting consumer's household is collected in the survey and can be used to tabulate consumer payment behavior by type of

household, and for research on the relationship between consumer payment choice and household characteristics.⁶

The core measurement concept of the SCPC is a *payment instrument*, which is something that consumers use to initiate and authorize payment to another party (see Definitions Table 2 for more detail). Payments are settled with some form of *money*, which economists most commonly define as M1:

- Currency, or “cash” (coins, bills and notes),
- Funds in a bank demand deposit account (checking) or other checkable deposit account,
- Traveler’s checks.

Two forms of money, cash and traveler’s checks, are both money and payment instruments, while other instruments are not.⁷ One recent, complicating exception to this classification is that some traveler’s checks are now being issued as prepaid cards (see below). Four technologies serve as payment instruments that can access funds in checking and other deposit accounts:

- Paper checks,
- Debit cards (also called check cards),
- Online banking bill payments (OBPP), which consumers initiate from their bank’s online banking web site,

⁶ The decision not to collect payment information at the household level should not affect the statistical properties of the aggregate estimates of consumer payment behavior, in expectation. However, the SCPC sampling weights do not account for household characteristics, and the CPRC is continuing to study the statistical and economic relationships between individual consumer payments and household payments in multi-consumer households. The SCPC contains a modest number of respondents who are members of the same household.

⁷ For more details about the difference between (“basic”) money and payment instruments (“derivative media”), see Tobin (2008).

- Bank account number payments (BANP), which occur when consumers give their bank routing and account numbers to a third party other than the bank to authorize payment.

Two other payment instruments have unique properties:

- Credit cards authorize payments to be settled later and hence are based on debt rather than money;
- Prepaid cards (also called gift cards, stored-value cards, or prepaid debit cards – including some types of traveler’s checks) authorize payment from balances that consumers pre-fund with some kind of payment instrument.⁸

The SCPC also tracks payments made by consumers directly from their income source (for example, from their paycheck). Although payments made directly from income sources replace conventional payments, they are not counted as a payment instrument at this time. See Definition Tables 1 and 2 for more details about banking concepts and payment instruments. Payment instruments also have various types of *characteristics*: acceptance, convenience, cost of use, cost of setup, recordkeeping, and security. For each payment instrument, the SCPC asks consumers to rate each of these characteristics as it applies to that instrument on a 1 to 5 scale (with 5 being the highest or best rating). Presumably, consumers base their ratings on their own objective knowledge about the actual payment characteristics they face. However, these ratings may contain measurement error due to incomplete information, memory loss, estimation, or

⁸ Depending on the type of prepaid card, including traveler’s checks, the consumer’s pre-funded balances may or may not be held in a bank account and could be paid using many different instruments, including cash, credit card, or BANP. In any case, the variety of sources of funds backing the prepaid card, as well as the legal and financial protections associated with them, may not be known or understood well by consumers. Also, prepaid cards funded by one consumer may be accessed and used by another consumer.

even subjective perception. See Definition Table 7 for more information about payment instrument characteristics.

The SCPC primarily measures two types of consumer payment choice. First, it measures the *adoption* (or *ownership*) of payment accounts, payment instruments, and other payment practices by asking whether or not consumers have the item and, for many items, whether they ever had it (if they did not have it at the time of the survey). The proportion of consumers who do not have an item now but did have it in the past reflects a minimum estimate of the percentage of consumers who have *discarded* the item. For some payment instrument, such as cash and money orders, adoption and discarding occur naturally as part of their use so ownership of these instruments is defined by their use during the past 12 months. Second, the SCPC also measures consumers' *use* of payment instruments and other payment practices in two ways: the share of consumers who use them in a month or year and the number of times consumers use them. In principle, it would be useful for the SCPC to measure the *dollar value* of consumer payments in addition to the number of payments. However, the SCPC does not attempt to measure the dollar value of payments because the dollar values are larger, more complicated numbers that are presumably more difficult for consumers to report.⁹ See Definition Tables 3 and 4 for more details about adoption and use.

The SCPC also measures consumer payments by type of *transaction*. Consumer payment transactions are broadly classified as bills or nonbills. A bill means a recurring payment—typically monthly, but potentially any one of a variety of frequencies—that is usually made after a good or service is purchased (for example, loan repayments, utility payments, subscription fees, membership dues, etc.). Nonbills are all other payments, which are broken down further into two categories: retail goods and services and person-to-person (P2P)

⁹ The dollar values are included in the new 2012 Diary of Consumer Payment Choice (forthcoming).

payments. Both nonbill payment categories can be further divided into two locations: online and other electronic payments (such as those made on mobile phones), and by mail, in-person, or by phone. See Definitions Table 5 for more details about transactions.

The SCPC employs a flexible reporting strategy to enhance recall and maximize the accuracy of its estimates of the number (use) of payments. First, respondents are asked to report the number of payments for a *typical* period rather than a *specific* calendar period. Typical periods are like an implicit average that ideally is consistent with consumers' sense of their regular or trend behavior; typical periods also have the advantage of eliminating unusual events that might affect high-frequency payments and obscure longer-run trends.¹⁰ Second, respondents are allowed to choose the frequency (week, month, or year) that best suits their recollection of payments for each combination of payment instrument and type of transaction. Third, respondents are asked to report their number of payments at relatively detailed levels—for each combination of 10 uniquely defined means of payment (nine payment instruments and direct deduction from income) and seven uniquely defined transaction types: three types of bills and four types of nonbill payments for goods and services, including payments to other people who are not merchants. Not all combinations of payment instrument and transaction type are possible because not all instruments are accepted for all transactions. Thus, respondents may report up to 41 categories of payments, depending on how many instruments they have adopted.

Supply and Demand Perspectives

The consumer-oriented concepts and definitions in the SCPC differ in some ways from the terminology and perspectives of the supply side of the payment system, especially in the

¹⁰ For a comparison of the effectiveness of using the typical period relative to a specific calendar period in a survey of consumer payment choice with recall, see Angrisani, Kapteyn, and Schuh (2012).

area of electronic payments.¹¹ This demand-side approach to measuring payment activity helps to fill a knowledge gap by complementing work on the supply-side perspective of payment services (banks, the Federal Reserve System, nonbank payment service providers, and consultants, and merchants who accept payment from consumers), which focuses on the networks and processes by which payments are settled.¹² In contrast, the SCPC measures how consumers initiate and authorize payments rather than how payments clear and settle.

The Federal Reserve's new strategic focus for financial services (Pianalto 2012) emphasizes the importance of developing an array of payment instruments that satisfy consumer preferences. To accomplish this objective, it is first important to obtain a better understanding of the relationship between the supply and demand for payment instruments. Then, to properly take into account consumer (end-user) preferences, policymakers need to understand the interaction between the supply and demand for payments. The supply-side cost of providing payment services is one important aspect of understanding the optimal payment system. However, there are distinct costs and especially benefits to consumers that affect the optimality of the money and payment system.

The SCPC, along with other related data projects from the Consumer Payments Research Center, can provide useful input for research and understanding of consumer preferences. Ultimately, however, it would be best to have detailed data on both the supply and demand for

¹¹ The BANP instrument is a prime example of how the consumer perspective on payments differs from the supply-side perspective. BANP is an electronic payment in which a consumer gives his or her bank account and bank routing numbers to a third party who then uses the numbers to obtain permission to debit the consumer's bank account for payment. Thus, it is like an electronic check. Consumer payments made by OBBP also work like an electronic check, except that the consumer's bank does not disclose the bank account number (or other personal information) to a third party. Viewed from the supply side of payments, both OBBP and BANP consumer payments settle on the Automatic Clearing House (ACH) network and are both classified as an "ACH payment" instrument in the Federal Reserve Payment Studies (see Federal Reserve System 2010).

¹² For example, see the latest *Federal Reserve Payment Study* (Federal Reserve System 2010).

money and payments, and how these interact for each consumer-merchant payment transaction, to be able to design an optimal money and payment system with appropriate government policies.

Official Tables and Data

The official 2010 survey results appear in SCPC Tables 1–33 of this paper (a total of 43 tables). The tables are organized broadly into four sections:

1. *Adoption* – Consumer adoption of bank accounts, nonbank payment accounts, and payment instruments and practices. **[Tables 1–12]**
2. *Use* – Consumer use of their adopted payment instruments to pay bills, purchase goods and services, and make other payments. **[Tables 13–26]**
3. *Assessments* – Consumer assessments of key characteristics of payment instruments and payment practices. **[Tables 28–29K]**
4. *Demographics and other* – Information about consumer demographic characteristics and financial status. **[Tables 30–33]**

A complete set of analogous tables containing estimates of the standard errors for the SCPC results is available online.¹³ The official definitions of survey concepts are found in Definition Tables 1–7.

The SCPC tables contain most, but not all, of the results from the 2010 survey. The 2010 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, and also many more responses that are not tabulated or presented here. A complete list of variables in the 2010 SCPC data set can

¹³ To obtain the standard error tables, see <http://www.bostonfed.org/economic/cprc/SCPC/index.htm>

be obtained from the data codebook and questionnaire.¹⁴ All SCPC data users are strongly encouraged to read Section VIII, Survey Methodology and Data, and the technical appendix (Angrisani, Foster, and Hitzenko 2013) for more details and instructions on how to use the data.

III. Consumer Use of Payment Instruments

Total Payments

Total consumer payments per month rebounded in 2010, as shown in Figure 1. The average number of payments made by consumers (per capita) increased 8.8 percent in 2010 (Q4 to Q4) to 73.0 in a typical month.¹⁵ Consumer payments in the fourth quarter of 2010 were 2.5¹⁶ percent above their level in the same period of 2008, which was near the mid-point of the previous recession as defined by the National Bureau of Economic Research (NBER) and denoted by the shaded region of Figure 1.

¹⁴ To obtain the 2010 SCPC data set, codebook, and questionnaire, see <http://www.bostonfed.org/economic/cprc/SCPC/index.htm>

¹⁵ The 2010 increase in total consumer payments per month is statistically significant at the 99 percent significance level.

¹⁶ All numbers reported in the text are copied from numbers in the official tables or, in the case of transformations such as growth rates, calculated using the numbers in the official tables, which are rounded to integers or a small number of decimals. Similar calculations using variables from the official SCPC dataset, which have more precision, may produce slightly different estimates in some cases due to the lack of rounding.

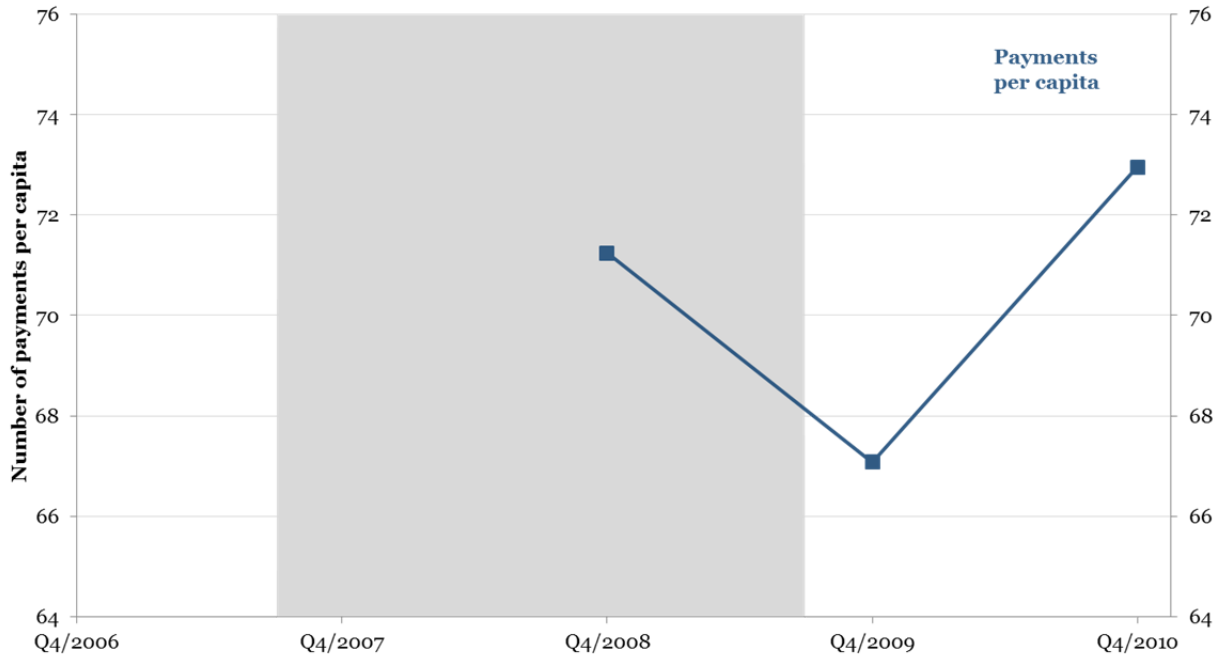


Figure 1: Number of consumer payments per capita per month

Source: 2010 Survey of Consumer Payment Choice, Table 20.

Although the number of consumer payments in 2008–2010 appears to have moved procyclically during this unusually tumultuous time, with only three annual time series observations it is simply too soon to determine the cyclical character of the number of consumer payments; that will have to wait until additional years of data become available. Readers should also be aware that the number of consumer payments is not the same as the National Income Account measure of real consumption (per capita); Section VIII explains the relationship between the two measures.

Payments by Instrument and Transaction Type

In 2010, the SCPC tracked the number of payments made by consumers using 10 means of payment (nine payment instruments plus automatic deductions from income sources) for seven transaction types, as shown in Table 1. The table shows the average number of payments made by consumers in a typical month for each combination of instrument and transaction.¹⁷ Blank table entries indicate combinations for which the means of payment is assumed not to be accepted for the transaction. For example, consumers cannot use cash to pay online.

The largest number of consumer payments used cash (9.4 per month) and debit cards (9.2) to pay for goods, followed by payments for services using cash (7.1) and debit cards (6.0). Consumers also made 5.4 credit card payments for goods and 3.8 for services. Another 2.7 cash payments were made by consumers to other consumers (or person-to-person, P2P) for unspecified reasons. No other means of payment accounts for as many as 2.0 payments for nonbills.

The largest numbers of bill payments are made by mail, phone, or in person using check (3.3) or cash (2.5). Among payment instruments, however, debit cards are used to make the most bill payments: 2.1 automatic, 2.0 online, and 2.3 by mail, phone, or in person, for a total of 6.3¹⁸ bill payments. Consumers make several automatic and online bill payments each month using OBBP and BANP as well.¹⁹

¹⁷ The average U.S. household had about two consumers (age 18 or older) in 2010, so doubling the numbers in Table 1 yields an approximate estimate of payments per household (excluding payments by children).

¹⁸ Numbers do not sum exactly due to rounding.

¹⁹ The number of payments in each category may not necessarily reflect consumers' preferred choices if there are constraints on their adoption and use of payment instruments, if merchants vary in their acceptance of payments, or if other factors influence consumer decisions. However, if these actual choices do reflect consumers' preferred payment choices, then consumer preferences can be estimated from a model of consumer payment choice as shown in Koulayev, Rysman, Schuh, and Stavins (2012).

	Bill Payments			Nonbill Payments			
	Automatic	Online	Mail, phone, in person	Online	Goods	Services & other	Person to person
Cash			2.5		9.4	7.1	2.7
Check			3.3	0.6	1.6	1.6	0.9
Money order			0.3	0.1	0.1	0.1	0.1
Traveler's check*							
Debit card	2.1	2.0	2.3	1.3	9.2	6.0	0.5
Credit card	1.2	0.9	1.2	0.8	5.4	3.8	0.2
Prepaid card			0.1	0.1	0.2	0.1	
OBBP	1.2	1.9					0.2
BANP	1.2	1.3		1.0			0.2
Income deduction	0.6						

Table 1: Average number of payments made in typical month, by transaction type

* Traveler's checks are reported in a separate section, outside the payment instrument/transaction type section, and have an average number of 0.0 payments after rounding.

Source: 2010 Survey of Consumer Payment Choice, Tables 23–25.

Payments by Transaction

Of the average 73 payments in a typical month in 2010, consumers made an average of 21.2 bill payments (or 29.2 percent of total payments) and 51.4 nonbill payments (70.8 percent), as shown in Figure 2.²⁰ Among bills, the most common method of payment by consumers was by mail or in person (9.2 per month). Bill payments set up by consumers to be made automatically each

²⁰ The number of bill payment in the SCPC tends to be higher than other industry estimates. Potential explanations are: 1) the SCPC asks respondents to report bill payment at a more detailed level of type and payment instrument, which may enhance respondent recall; 2) the SCPC leaves the definition of bills open to respondents' interpretation, which may lead to a more inclusive estimate; and 3) the SCPC respondents are consumers rather than heads of households, which may lead to some double-counting of household bills. The CPCR continues to study this issue.

month (6.1) and bill payments made online at the consumer’s discretion throughout the month (5.9) were about the same.

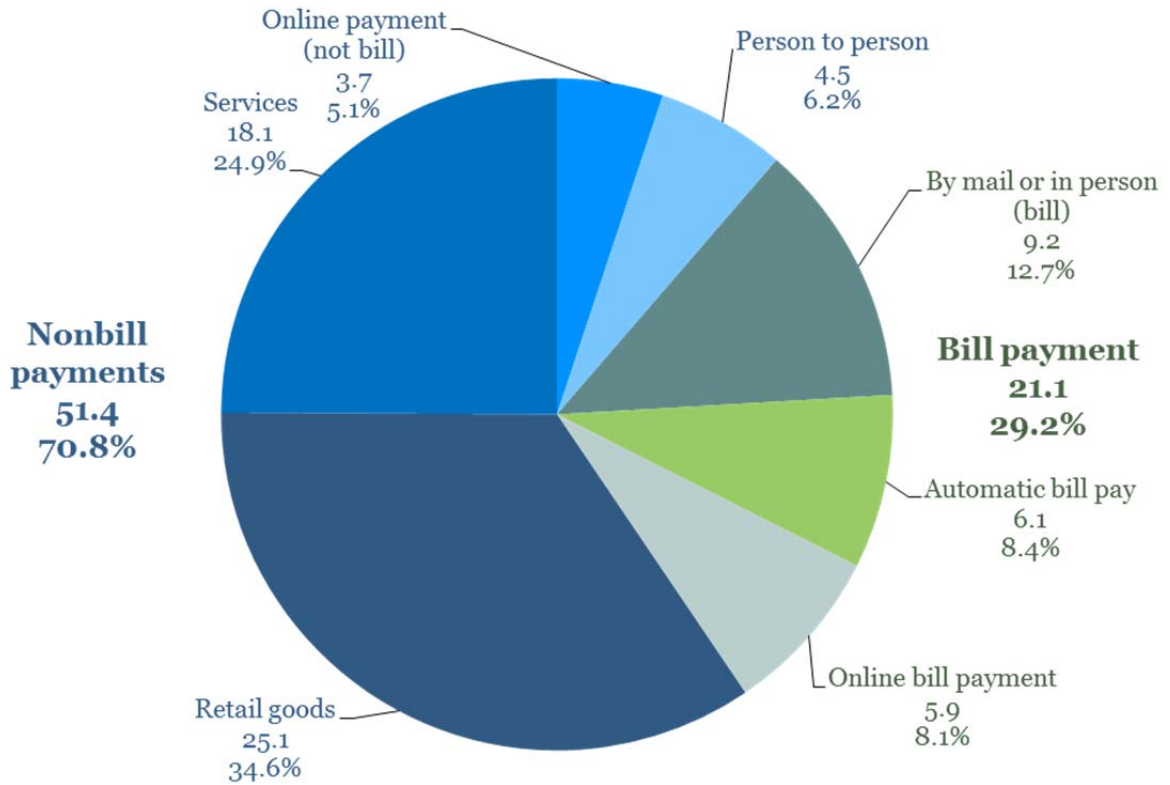


Figure 2: Number of consumer payments per month by transaction

Source: 2010 Survey of Consumer Payment Choice, Table 21.

Most nonbill consumer payments were made in person. In a typical month, consumers made an average of 25.1 payments for retail goods and 18.1 payments for services while shopping offline, plus another 4.5 payments directly to another person (person-to-person, or P2P). Consumers made an average of 3.7 nonbill online payments per month.

The average number of consumer payments by transaction type shifted primarily among nonbill payments in 2010, as shown by the dark bars in Figure 3.²¹ The share of consumer payments for services made by mail, in-person, or by phone increased 5.6 percentage points, while the share of payments for retail goods made by mail, in-person, or by phone decreased 6.3 percentage points. The share of consumer payments made online for retail goods and services combined declined 2.1 percentage points, about the same decline in this category as in 2009 (2.4 percentage points). Other changes in payment shares were not statistically significant.

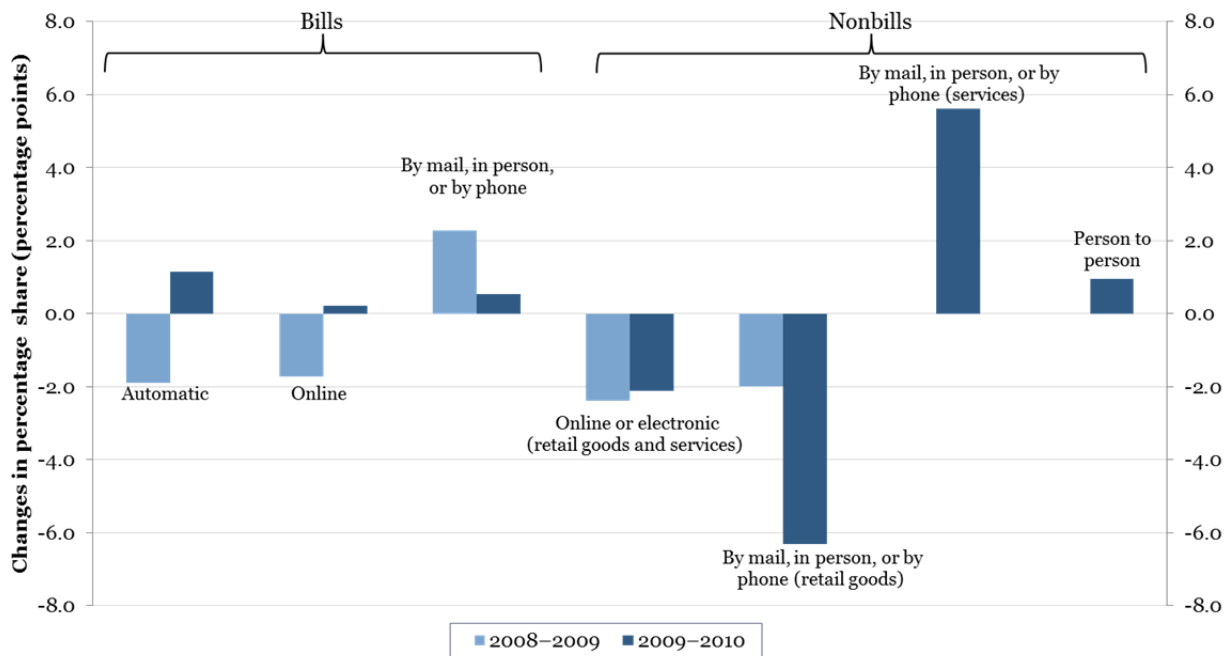


Figure 3: Changes in consumer payments by transaction type

Source: 2010 Survey of Consumer Payment Choice, Table 21.

²¹ The statistical hypothesis of no change in the mix of transaction payments by consumers in 2010 can be rejected at the 95 percent significance level.

Payments by Instrument Type

In 2010, consumers made an average of 36.4 payments using payment cards (or 50.0 percent of total payments), 29.0 payments using paper instruments (40.0 percent), and 6.7 payments using electronic and other instruments (9.2 percent) in a typical month, as shown in Figure 4. Debit cards and cash continued to be most popular among consumers. Consumers made an average of 22.7 debit card and 21.1 cash payments in a typical month, accounting for about three-fifths of all consumer payments in a typical month (59.7 percent). The next most popular payments instruments were credit cards (13.3 payments) and checks (7.7 payments). All other payment instruments were used for an average of 8.5 payments per month.

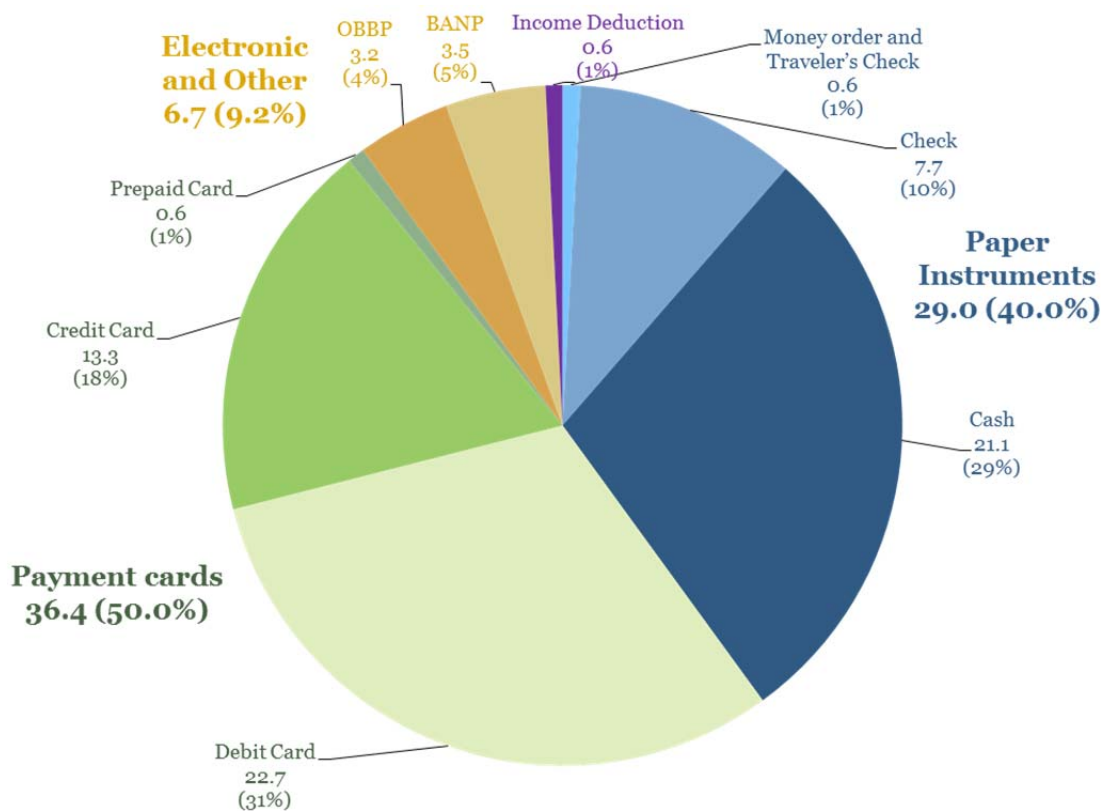


Figure 4: Number of consumer payments in a typical month, by payment instrument

Source: 2010 Survey of Consumer Payment Choice, Table 20.

Note: Percentages do not sum to 100 due to rounding.

In 2010, consumers' use of payment instruments shifted moderately from paper to cards, as shown by the dark blue bars in Figure 5.²² The shares of consumer payments made using debit cards and credit cards increased 2.1 and 1.2 percentage points, respectively. The 2010 increase in the shares of debit and credit card payments partially offset larger declines in the shares of these same instruments as occurred in 2009 (the light blue bars)—most notably the 3.9 percentage point drop in credit card use.

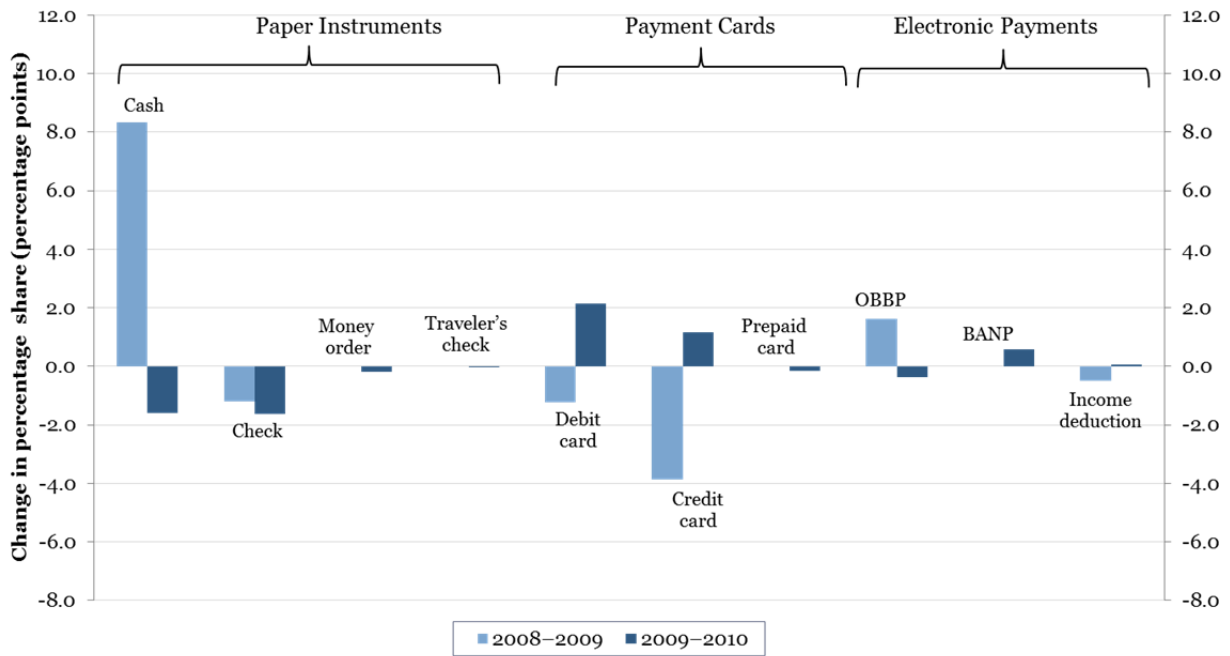


Figure 5: Change in consumer payments by instrument type

Source: 2010 Survey of Consumer Payment Choice, Table 20.

Note: Missing bars indicate data for indicated years are not comparable.

In contrast, the shares of consumer payments made using either cash or check in 2010 declined 1.6 and 1.7 percentage points, respectively. The 2010 decline in cash share was modest

²² The statistical hypothesis of no change in the mix of payment instrument use by consumers in 2010 can be rejected at the 95 percent significance level.

compared with the 8.4 percentage point increase in cash share in 2009, so the share of cash payments by consumers remained higher than in the middle of the recession. The 2010 decrease in check share was consistent with a longer-term trend decline in consumer check use.²³

Simulation results indicate that the shares of consumer use of all other payment instruments had very low probabilities of having changed statistically significantly since 2009. Thus, the share of OBBP payments, which rose 1.6 percentage points in 2009, was likely to have remained higher in 2010 than in 2009. Although the share of BANP is estimated to have been lower in 2009 than 2008, that change may not be an accurate estimate of actual consumer BANP because of alterations to the 2009 survey questionnaire. Furthermore, as shown in Section IV, there were much larger changes in the rate of adoption of BANP. Section IV also provides additional discussion about consumer electronic payments that provide context and perspective for the SCPC results.

IV. Consumer Adoption of Payment Instruments

This section reports 2010 estimates of consumer adoption of payment instruments measured three ways: 1) adoption rates of individual payment instruments; 2) number of payment instruments adopted by consumers; and (3) portfolios of payment instruments adopted by consumers.

Individual Instruments

In 2010, consumer adoption of debit cards, prepaid cards, and BANP increased, as shown in

²³ In terms of growth rates, rather than changes in shares, the number of checks written by consumers declined 8.5 percent per year from 2006 to 2009, according to the Federal Reserve Payment Studies (see Federal Reserve System 2011), and declined 6.1 percent from 2009 to 2010, according to the SCPC. Through 2009, the FRPS did not provide estimates of consumer use of other payment instruments so it is not possible to calculate shares, and their changes, to compare with the SCPC.

Figure 6.²⁴ The biggest of these changes occurred in the share of consumers having BANP, up 8.9 percentage points. The 2009 share of consumers having BANP is estimated to have been much lower than in 2008, but this decline may not represent actual consumer adoption of BANP because of improvements to the 2009 questionnaire. A much smaller 2010 increase in adoption of OBBP was not statistically significant.

More consumers held payment cards in 2010 than in 2009. The shares of consumers adopting prepaid and debit cards increased 5.7 and 3.4 percentage points, respectively, over the previous year. Although smaller than the previous year, the 2010 increase in prepaid card adoption indicated growing dissemination of these cards among consumers. In contrast, the 2010 increase in adoption of debit cards reversed most of its decline in 2009. Credit card adoption was essentially unchanged despite the increase in use described earlier.

Moderately higher adoption of checks and lower adoption of money orders in 2010 partially offset opposite movements in 2009 in the shares of consumers adopting each of these paper instruments.

²⁴ The statistical hypothesis of no change in the adoption of payment instruments by consumers in 2010 can be rejected at the 95 percent significance level.

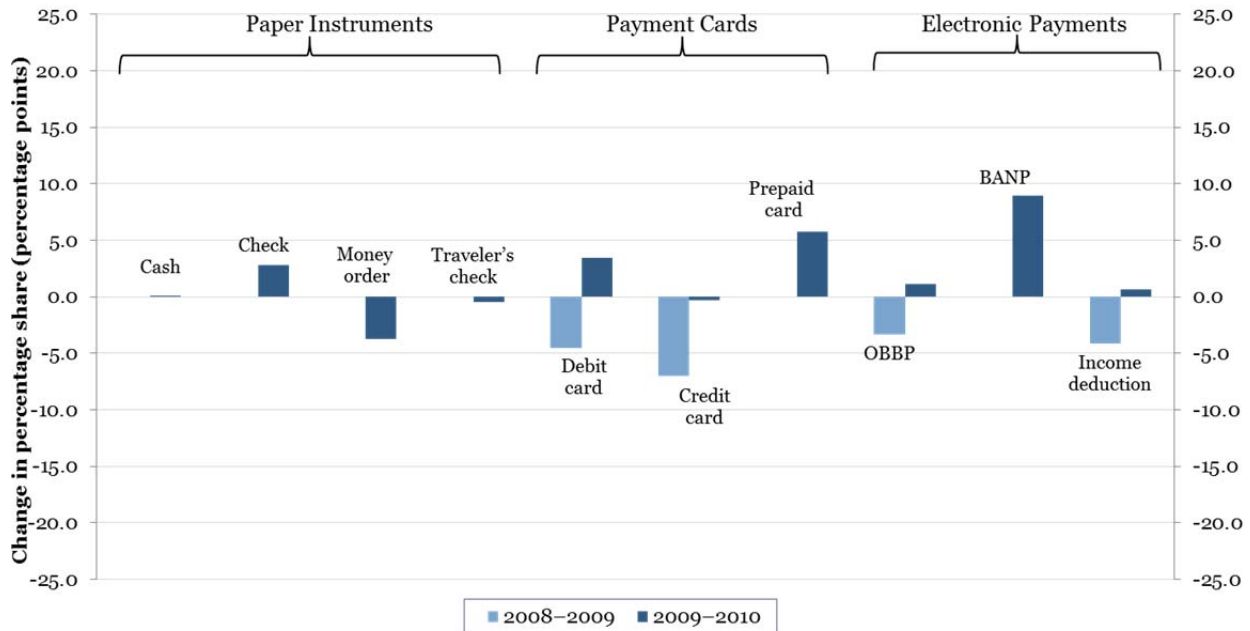


Figure 6: Changes in consumer adoption of payment instruments

Source: 2010 Survey of Consumer Payment Choice, Table 4.

Note: Missing bars indicate data for indicated years are not comparable.

Figure 7 puts the recent changes in consumer holding of payment instruments into perspective by plotting adoption rates over time.²⁵ As of 2010, about two-thirds or more of consumers had adopted the five most popular payment instruments: cash (100 percent), blank checks (87.0 percent), debit cards (78.4 percent), credit cards (70.3 percent), and BANP (64.8 percent). About half of consumers had adopted OBBP (48.7 percent), and well more than one-third had adopted prepaid cards (38.2 percent). More than one in five consumers had adopted money orders (23.6 percent), and few had adopted traveler's checks (6.2 percent).

²⁵ Figure 7 combines SCPC data on consumer adoption of payment instruments with similar data for households from the Survey of Consumer Finances (SCF), where available and comparable, to provide a perspective on longer term trends. See <http://www.federalreserve.gov/econresdata/scf/scfindex.htm> for more details. Except for credit card spending, the SCF does not contain data on the use of payment instruments comparable to data from the SCPC.

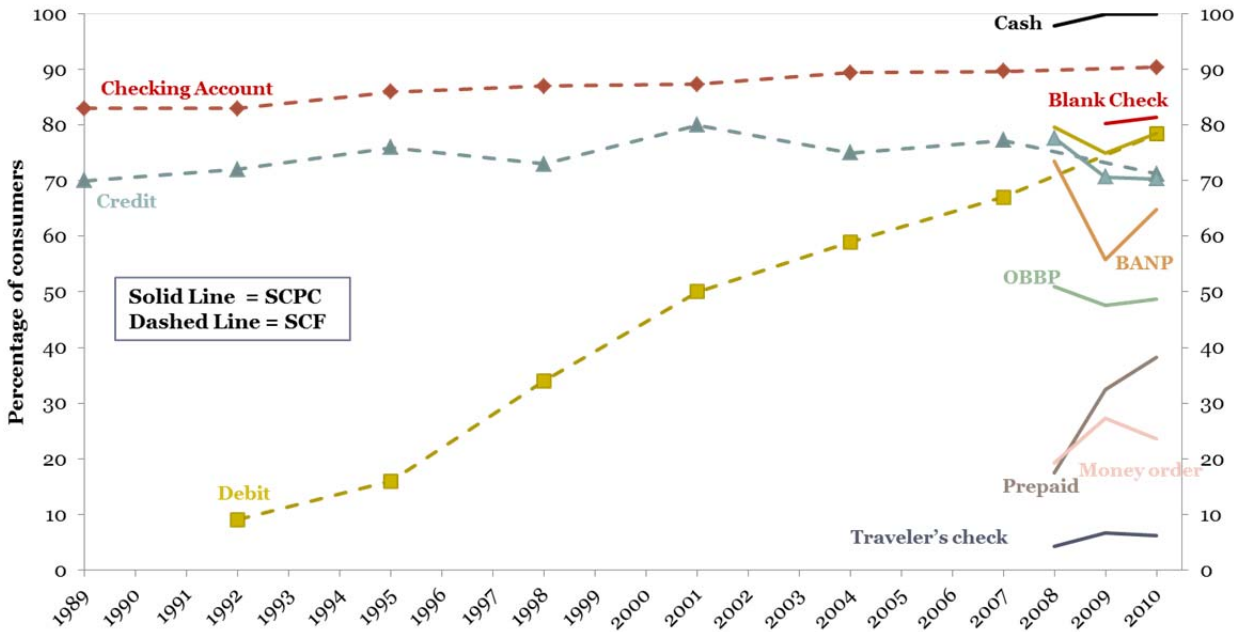


Figure 7: Consumer adoption of payment instruments

Source: 2010 Survey of Consumer Payment Choice, Table 4; 1983–2007 Survey of Consumer Finances.

Most shares of consumer adoption of payment instruments generally appear to be stabilizing during recent years. The shares of consumers holding cash, checks, and credit cards have been relatively high and steady for many years. After a long trend increase, the share of consumers with debit cards appears to be leveling off near 75–80 percent. The share of consumers with OBBP has fluctuated little in the few years for which data are available.

In contrast, consumer adoption of prepaid cards shows evidence of a trend increase in recent years as the share of consumers holding prepaid cards more than doubled from 2008 to 2010. The increase from 2008 to 2009 may have been partly due to improvements to the 2009 SCPC questionnaire. However, other data sources also show an increase in prepaid card adoption during the past decade (for example, Pew 2012). Furthermore, the time series pattern of prepaid card adoption is broadly similar to the early stages of debit card adoption, both measures being roughly consistent with the flat S-curve pattern that typifies diffusion of new technologies.

Trends in consumer electronic payments are more difficult to discern because data availability is limited (three years) and, in the case of BANP, the year-to-year fluctuations are large. It is possible that the sharp decline in BANP in 2009 was partly due to improvements in the SCPC questionnaire. Adoption of OBBP, which did not change definition and has similarities to BANP as an electronic payment, was relatively stable during the same time. The large swings in BANP adoption are difficult to reconcile with the relatively modest changes in payment use of BANP described in the previous section. Furthermore, actual transactions data from NACHA (The Electronic Payments Association) show a longer run trend increase in total consumer electronic payments.²⁶ However, the OBBP and BANP definitions in the SCPC pertain only to certain subcategories of the NACHA consumer electronic payments data, and it is difficult to match the two data sources exactly, as discussed in Section VIII. In any case, it not possible to determine BANP trends definitively at this time.

Portfolios of Instruments

In 2010, the number of payment instruments held by consumers was essentially unchanged, as shown in

Figure 8. On average, consumers held 5.2 instruments out of the nine common instruments tracked by the SCPC, up slightly from 2009 (5.0) but not much different from their holdings in 2008 (5.1). From a smaller group of four payment instruments, including only a subset of BANP (automatic ACH bill payments), consumers held 3.0 of them on average. This number is approximately twice as many as in 1989, reflecting a trend increase in consumer holdings of

²⁶ We thank NACHA CEO Janet Estep for bringing this issue to our attention. From 2008 to 2011, the NACHA estimate of total consumer electronic payments closest to the SCPC measure grew 5.4 percent per year in per capita terms.

payment instruments. However, average holdings in both the four-instrument set and the nine-instrument set appear to have been growing more slowly in recent years.

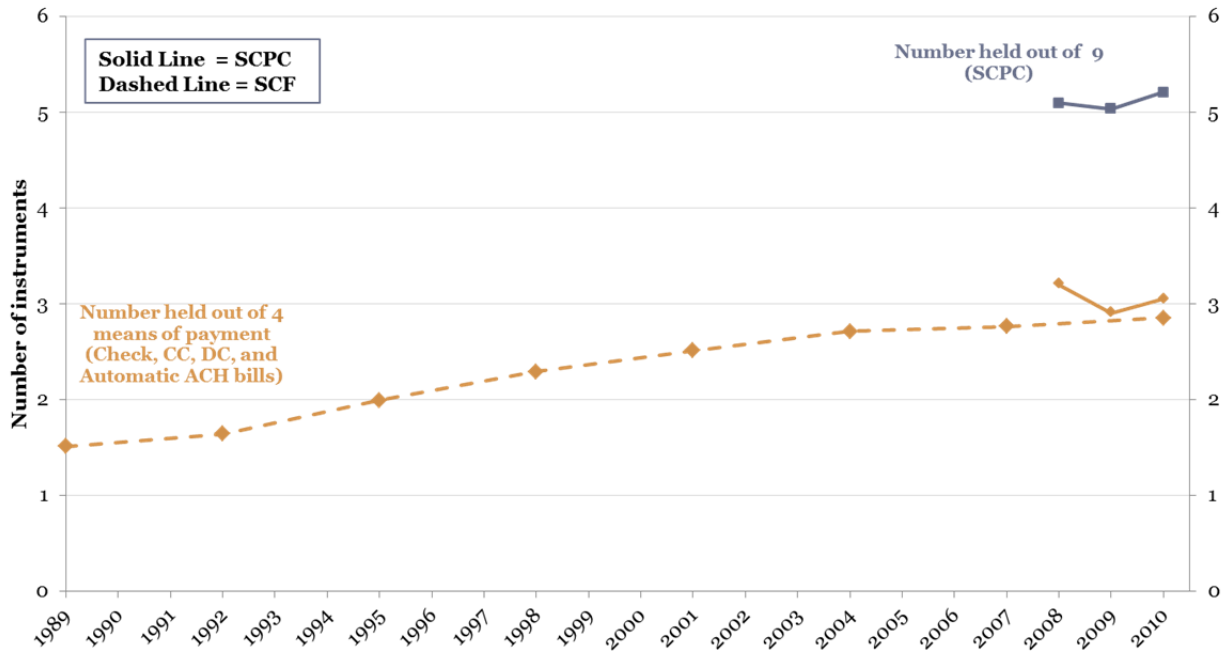


Figure 8: Average number of payment instruments adopted by consumers

Source: 2008–2010 Survey of Consumer Payment Choice, authors’ calculation; 1983–2007 Survey of Consumer Finances.

Another way to view consumer adoption of payment instruments is to look at individual portfolios of instruments held by consumers, as shown in Figure 9. In 2010, the most common number of instruments held by individual consumers was five (held by 27.4 percent of consumers). But almost as many consumers (26.0 percent) had six instruments, and another 30.6 percent of consumers had four or seven instruments. Only about one in eight consumers (13.1 percent) held fewer than four or more than seven payment instruments.

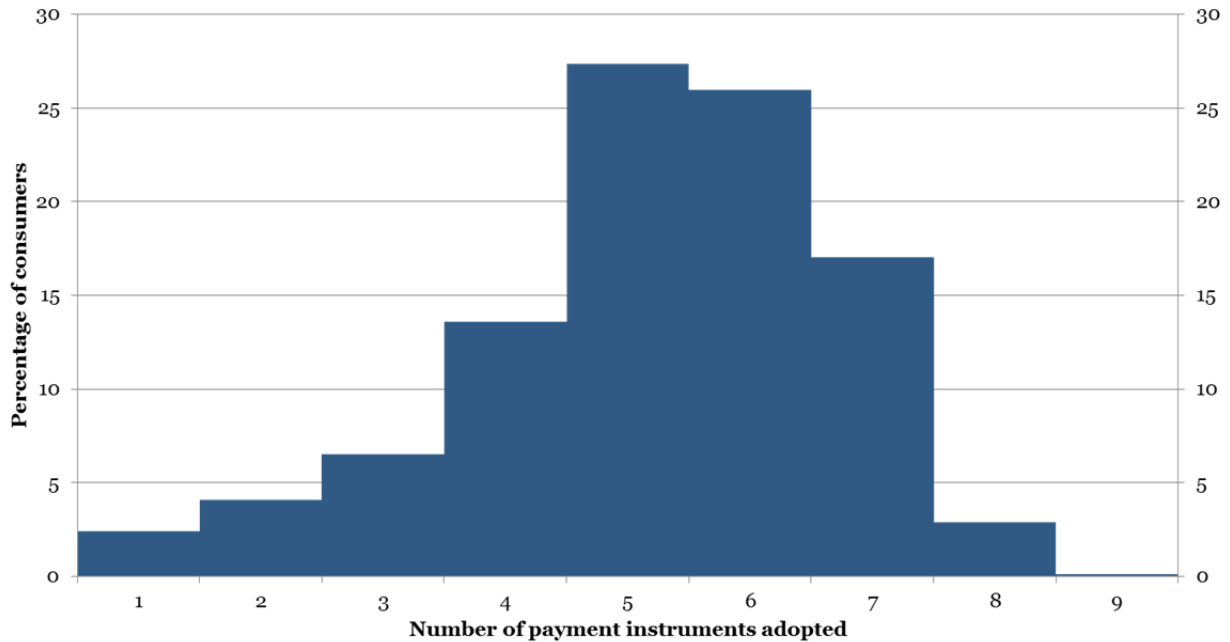


Figure 9: Number of payment instruments adopted by individual consumers

Source: 2010 Survey of Consumer Payment Choice, authors' calculations.

An even deeper look at individual portfolios of payment instrument reveals considerable variety, as Table 2 shows. The most common portfolio of six instruments (two from each category of paper, cards, and electronic: cash and check, debit and credit cards, and OBBP and BANP) was held by only 11.8 percent of all consumers and the top five portfolios account for only about one out of three consumers. These results demonstrate there is not one clear representative consumer with regard to payment instrument holdings and highlight the challenge of explaining the wide array of consumer payment choices. In fact, consumers held 135 unique portfolios (different combinations of instruments) in 2010.

Number of PI	Cash	Check	Traveler's Check	Money Order	Credit Card	Debit Card	Prepaid Card	OBBP	BANP	Percentage of Consumers
6	X	X			X	X		X	X	11.9
7	X	X			X	X	X	X	X	9.1
5	X	X			X	X			X	7.2
5	X	X				X		X	X	3.9
5	X	X			X	X		X		3.8

Table 2: Top 5 payment instrument portfolios adopted by individual consumers

Source: 2010 Survey of Consumer Payment Choice, authors' calculations.

Cash Management

Total per-capita domestic U.S. currency in circulation grew 3.3 percent in 2010 (Q4/Q4), after growing 7.5 percent in 2009, as shown in Figure 10. This estimate reflects total cash holdings by all domestic U.S. agents (households, firms, nonprofit, and government) as well as balances held in bank vaults.²⁷ For consumers only, the average amount of currency held declined to \$138 in the fourth quarter of 2010 from \$147 four quarters prior; these amounts exclude unusually large-value cash holdings.²⁸ The 2010 decline in consumer cash holdings is relatively modest and only marginally statistically significant. Note that dollar figures in this section are not adjusted for inflation during the three-year period from 2008 to 2010. During this time, the annual percentage change (Q4/Q4) in the consumer price index was about 1-1/2 percent.

²⁷ The estimate of domestic currency in circulation follows the methodology developed by the Board of Governors of the Federal Reserve System using Flow of Funds data (Federal Reserve Board 2013c). It excludes U.S. currency held in foreign countries.

²⁸ Average cash holding by consumers in Figure 10 excludes large-value holdings of currency (that is, holdings greater than the 95th percentile, which is approximately \$1,200). 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. See Section 5.2, "Cash Values," in the technical appendix for more information.

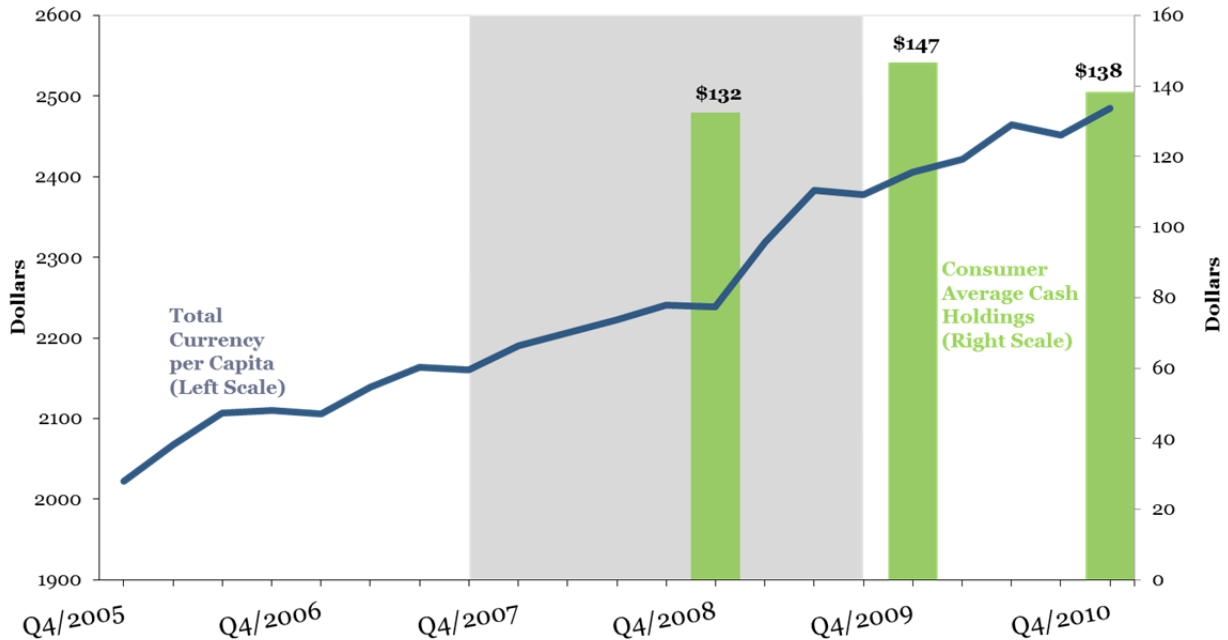


Figure 10 : U.S. domestic currency in circulation

Source: 2010 Survey of Consumer Payment Choice, Table 9; Haver Analytics.

Given that consumer cash payments (Figure 4) and cash holdings (Figure 10) did not change much in 2010, it is not surprising that cash withdrawals were little changed as well. Consumers withdrew \$502 per month on average in 2010, up from \$488 per month in 2009, not a statistically significant change. Figure 11 shows cash withdrawals by the amount of withdrawal made most often and the typical number of withdrawals per month.²⁹ The amount per withdrawal and the number of withdrawals are measured at two sources: 1) the location where the consumer gets cash most often, and 2) all other locations combined. In 2010, the typical amount of withdrawal

²⁹ The number of withdrawals in a typical period follows the methodology for the number of payments. The amount of withdrawal made most often by a consumer may not be the same as the average amount of withdrawal by the consumer. Statistically, “most often” corresponds to the mode of a distribution rather than the mean. The SCPC asks for the most common amount to enhance consumer recall. If the mode and mean are not equal, this survey methodology choice produces bias in the SCPC estimate of total withdrawal amount in a month. The direction of bias depends on whether the mean is larger or smaller than the mode.

at the most frequented location was \$133 and the amount at all other locations was \$57. Although both amounts were down slightly from 2009, neither decrease was statistically significant. Also in 2010, the number of withdrawals per month was 3.9 at the most frequent location and 2.1 at all other locations. Both estimates of the number of withdrawals increased significantly from their 2009 levels (which were 3.6 and 1.6 per month, respectively).

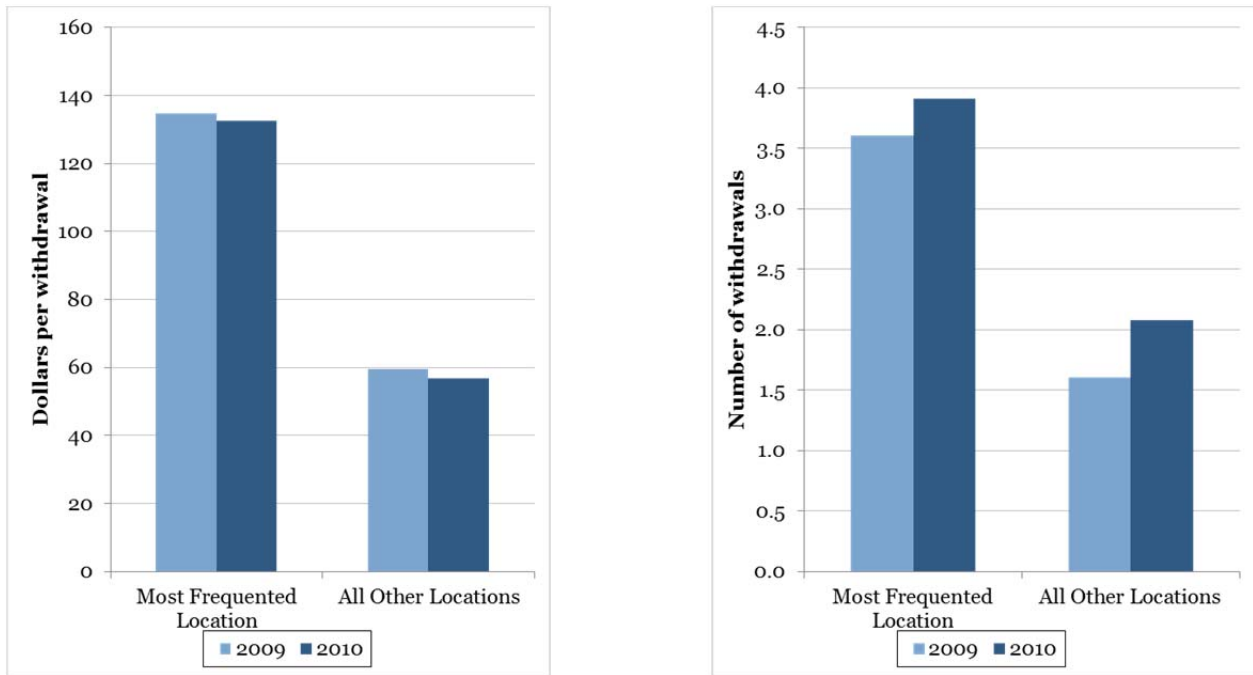


Figure 11 : Amount of cash per withdrawal and number of cash withdrawals per month

Source: 2010 Survey of Consumer Payment Choice, Table 9.

Note: The left panel shows the amount of cash per withdrawal at the most frequent location compared to all others. The right panel shows the number of cash withdrawals per month per consumer.

V. Bank and Other Payment Accounts

Consumer ownership of bank and other payment accounts was essentially unchanged in 2010, as shown in Figure 12.³⁰ In 2010, the percentage of consumers with a checking or saving account at a bank was 92.7 percent, up just 0.9 percentage point from 2009. Consumer ownership of checking accounts was 91.9, an increase of 1.8 percentage points, and consumer ownership of saving accounts was 72.7 percent, down 1.6 percentage points.

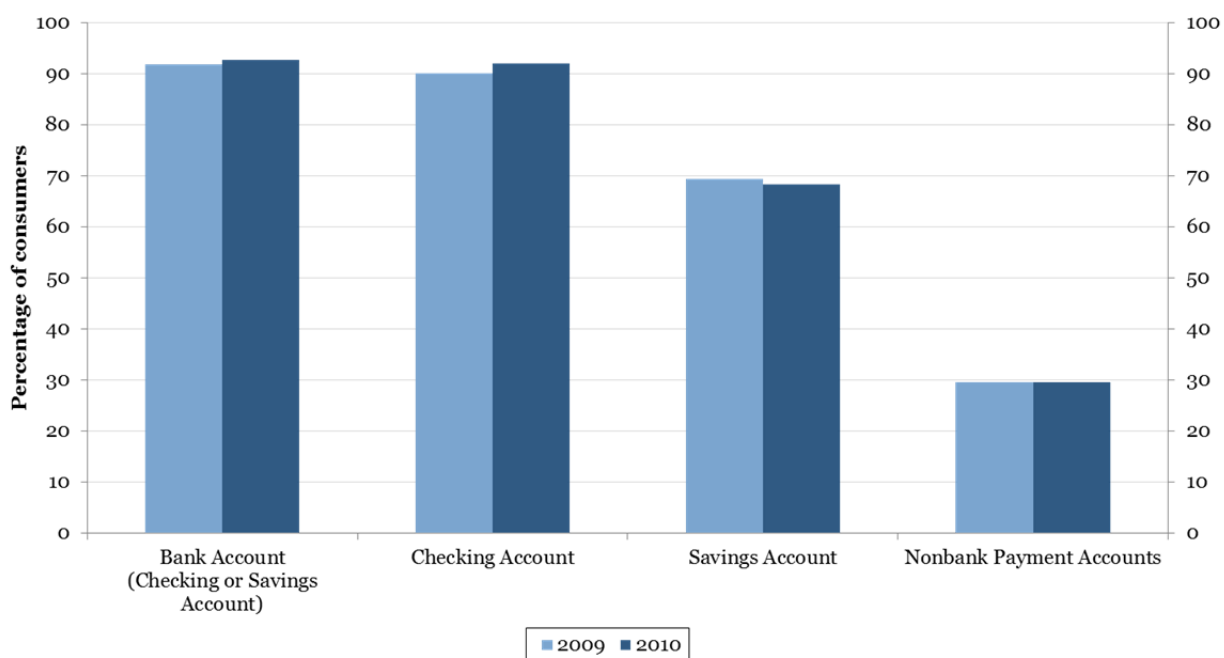


Figure 12 : Consumer ownership of bank and other payment accounts

Source: 2010 Survey of Consumer Payment Choice, Table 1.

Some consumers own nonbank deposit accounts to make payments, including those held with PayPal, Google Wallet, Facebook, or other companies that are not depository institutions. In 2010, the share of consumers who owned nonbank payment accounts was 29.7, essentially unchanged from 2009 (29.6). Due to resource limitations, the SCPC does not collect

³⁰ None of the changes discussed in this section were statistically significant at the 95 percent significance level.

any other information about the nature or use of nonbank payment accounts other than consumer adoption of the accounts, so it does not provide an estimate of the number of payments by instrument and account.³¹

The SCPC does not collect data on the dollar value of deposits held in bank accounts or nonbank payment accounts. Originally, the focus of the SCPC was on measuring consumer use of payment instruments, and checking account balances are not payment instruments per se. However, checking account balances are money (an asset), like cash, and the dollar amount in a consumer's checking account probably is correlated with a consumer's cash management. Therefore, it might be useful to collect data on checking account dollar amounts in future versions of the SCPC.

More consumers accessed their bank accounts in 2010 than in 2009, as shown in Figure 13. The share of consumers accessing their bank account through one of five methods (other than a payment instrument) increased to 90.7 percent in 2010, up 1.0 percentage point from 2009.³² Given that 92.7 percent of consumers have a bank account, the percentage of bank account adopters who accessed their account during the past year is 97.8 percent (90.7 percent divided by 92.7 percent). Compared with 2009, more consumers accessed their bank accounts in 2010 through ATMs (up 5.5 percentage points) and online banking (up 3.5 percentage points). Changes in other methods of accessing bank and payment accounts were not statistically significant, including the 1.6 percentage point increase in mobile banking.

³¹ Because the SCPC counts the number of payments initiated by consumers, it focuses on payment instruments rather than on the accounts, networks, platforms, or related technologies through which these payments occur. For example, the number of credit card payments made by consumers in a typical month (13.3 in 2010) may include some credit card payments made via PayPal. A similar issue arises for mobile payments described in the next section.

³² The statistical hypothesis of no change in the access of bank and payment accounts by consumers in 2010 can be rejected at the 95 percent significance level.

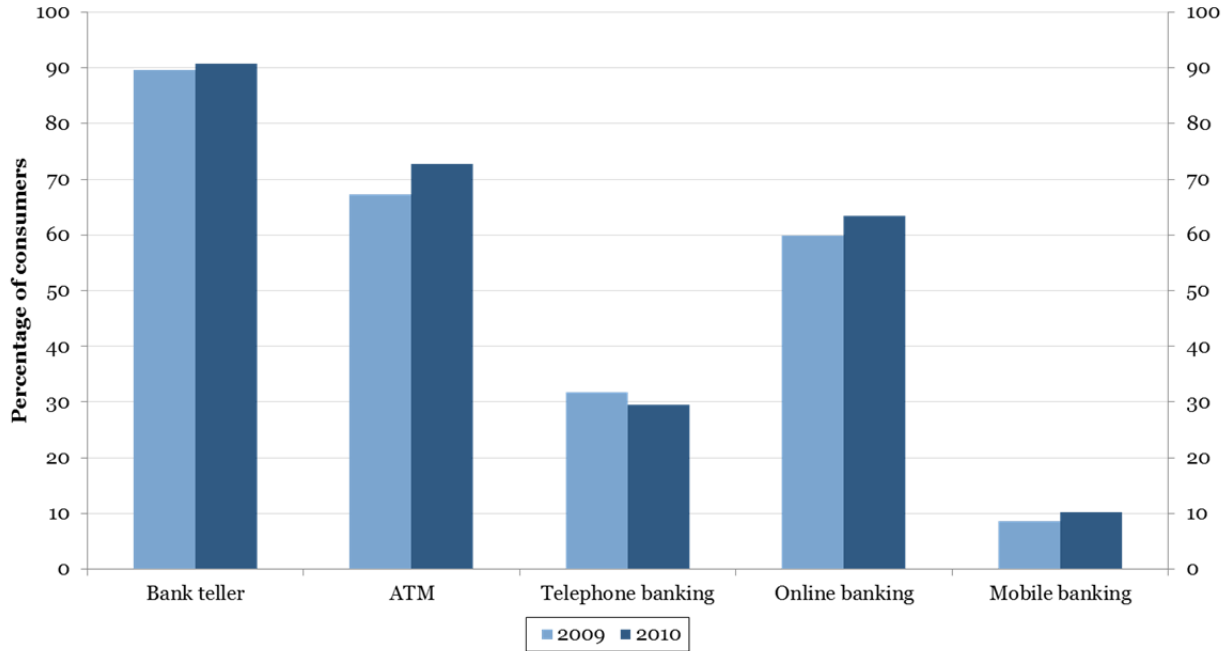


Figure 13: Consumer access of bank accounts
Source: 2010 Survey of Consumer Payment Choice, Table 13.

VI. Selected Topics

This section briefly describes selected 2010 SCPC results pertaining to payment instruments and practices that are changing rapidly, gaining notoriety, or in early stages of diffusion and adoption.

Prepaid Cards

Although prepaid cards have existed for decades, consumer prepaid activity appears to have expanded notably in 2008-2010. As indicated earlier in Figure 7, the share of consumers holding prepaid cards is estimated in the SCPC to have reached 38.2 percent by the end of 2010.

Other sources also indicate an increase in prepaid card activity (Hewitt 2013).³³ In addition, governments are using prepaid cards to distribute benefits, and employers are using prepaid cards for payroll.³⁴

A deeper look at the SCPC data reveals a more nuanced view of developments in consumer prepaid card activity through 2010. Table 3 shows evidence suggesting that prepaid card activity likely grew primarily on the extensive margin of use rather than the intensive margin. Although a larger share of consumers held prepaid cards in 2010 than in 2009, the number of prepaid cards held per adopter declined to 1.7 in 2010 from 2.4 in 2009, and the share of prepaid card adopters using a prepaid card during the year fell more than 10 percentage points to 32.1 percent in 2010.³⁵ Among prepaid card holders, the number of prepaid card payments per consumer was 1.6 in 2010 but the change from 2009 was not significant. Taken together, these results suggest that newer prepaid card holders tend to be less intensive users than consumers who already had prepaid cards.

³³ The Federal Reserve Payment Study reports that total payments made using prepaid cards (by all consumers, businesses, and governments) increased 21.5 percent per year from 2006 to 2009 (Federal Reserve System 2011). Mercator Advisory Group estimates that the number of prepaid cards increased from 15 million in 2007 to 52 million in 2011, a 24 percent annual rate of growth (Hewitt 2013).

³⁴ For more details about prepaid cards, see Rhine, Jacob, Osaki, and Tescher (2007) and Wilshusen, Hunt, van Opstel, and Schneider (2012).

³⁵ The hypothesis of no change in the number of prepaid cards per adopter can be rejected at the 99 percent significance level. The hypothesis of no change in the share of prepaid card adopters using a prepaid card during the year can be rejected at the 90 percent significance level.

	2009	2010
Number of prepaid cards per adopter	2.4	1.7
Number of prepaid card payments in a typical month per adopter	2.1	1.6
Percentage of adopters using prepaid card in a given year	42.7	32.1
Percentage of prepaid card adopters who reloaded in the past 12 months	46.5	44.1
Number of reloads per month, reloaders only	1.7	2.0
Amount per prepaid reloading, reloaders only	\$146	\$79

Table 3: Consumer prepaid card activity

Source: 2010 Survey of Consumer Payment Choice, Tables 7, 9, 14, 20.

For some prepaid cards, consumers can “reload” the cards, meaning they can add value to the card using cash or another source of money or credit. The dollar amount loaded on prepaid cards fell almost by half to \$79 per reloading in 2010, and the share of consumers reloading their cards fell to 44.1 percent.³⁶ The number of prepaid card reloadings per adopter was 2.0 per month in 2010, but the change from 2009 was not significant. These reloading results also suggest less intensive use of prepaid cards by consumers in 2010.

Mobile Banking and Mobile Payments

Mobile banking and mobile payments are newer technologies that have been receiving a lot of attention recently. Although these technologies are increasingly familiar to consumers, it is important to define them carefully for measurement in surveys and data analysis. Thus, the SCPC definitions may differ from those used in the industry, media, or elsewhere.

³⁶ The hypothesis of no change in these two measures can be rejected at the 90 percent level of significance. Rhine et al. (2007) found a higher reload average (\$180) in data on general purpose prepaid card from card processors. The discrepancy with the SCPC may be attributable to the fact that the SCPC includes all prepaid cards if general purpose cards have higher average loads, or if consumers only report their own prepaid card loading if other parties (such as governments, employers, etc.) tend to load higher values than consumers do.

In the SCPC, *mobile banking* is defined as the practice of accessing a bank account using a mobile phone. As of 2010, mobile banking access could occur in at least one of three ways on a mobile phone: 1) accessing a bank web site using a web browser; 2) using a mobile banking application (“app”) downloaded onto the phone; and 3) sending or receiving a text message. Once the bank account is accessed via mobile phone, the consumer can check balances, transfer money, make payments, and conduct other banking business.

In the SCPC, a *mobile payment* is defined as the practice of paying for goods and services using a mobile phone. Unlike mobile banking, which usually is tied to a specific bank, mobile payments can occur in a variety of ways using different payment instruments and therefore the concept is more difficult to define. As of 2010, the SCPC measured only two types of mobile payments.³⁷ One is a *contactless mobile payment*, which make use of an NFC (near field communication) device or QR (quick response) code that can communicate with a reader at a point of sale (POS).³⁸ This definition is consistent with terminology used in the mobile payments industry.

However, the SCPC focuses on measuring all consumer payments, and consumers can make many other types of payments using a mobile phone. Therefore, the SCPC also includes *text/SMS mobile payment*, such as messages sent to buy something or to make a charitable donation. For many of these types of payments, consumers authorize their cellular carrier to make a payment to a third party, which the consumer repays later upon receipt of the cell

³⁷ In 2011 and 2012 the SCPC included additional types of mobile payments.

³⁸ See Crowe, Rysman, and Stavins (2010) for an analysis of mobile payments that focuses on contactless payments using NFC technology. Mobile payments by bar code or QR code can be made using LevelUp, for example, and are addressed specifically in the 2011 SCPC and beyond.

phone bill. In this case, the consumer is authorizing a credit payment in a fashion similar to the way he or she would use a charge card that requires full payment by the end of the month.³⁹

In general, mobile payments are not different from all other payments tracked in the SCPC; all of these payments are based on consumer initiation and authorization using a payment instrument. Essentially all payments made by consumers on a mobile phone use a standard payment instrument (except the text/SMS mobile payments, of course). Thus, consumer payments made using a mobile phone work quite similarly to the way consumer payments made on a laptop computer or a tablet device work; these are all “mobile” and use either wireless or cellular technology to transmit payments. For example, a consumer could use a credit card to make a mobile payment by 1) using a contactless device in the phone at the checkout counter; 2) entering the credit card number using a mobile browser at a store’s web site; or 3) entering a credit card number into a merchant’s app. Consequently, the SCPC treats mobile phones as another device through which consumers make payments with instruments as opposed to viewing mobile payments as being different from other consumer payments (again, with the exception of text/SMS payments).

Finally, because the SCPC focuses on counting the number of consumer payments, the definitions of mobile banking and mobile payments inherently overlap. For example, consumers who access their online banking web site using a web browser or app (a method of mobile banking) and then pay a bill with OBBP (a type of mobile payment) have performed

³⁹ For this reason, it might be reasonable to define mobile payments made by text/SMS sent to a cellular carrier or another nonbank as an official payment instrument that is analogous to, but different from, a credit/charge card issued by a bank. This classification is under consideration by the CPRC, but the technology and practice of mobile payments are diverse, complex, and changing rapidly. For example, some large brick-and-mortar merchants have mobile apps that do not use NFC, bar codes, or QR codes but also do not use nonbanks or carrier billing. One gas station chain uses text messages to pay at the pump and ACH for settlement of payment, and a QSR chain uses a prepaid-based mobile app based on a six-digit number that cashiers use to deduct money from the consumer’s prepaid mobile app.

both mobile activities simultaneously from the perspective of the SCPC. This concern does not arise in the 2010 SCPC but does in later years.

As of the fourth quarter of 2010, mobile banking and mobile payments were still relatively uncommon among consumers, as Figure 14 shows. In 2010, 92.2 percent of consumers had a mobile phone but only 11.5 percent of consumers had adopted mobile banking and 10.3 percent of consumers had used mobile banking in the previous 12 months. That is, about 90 percent (10.3 percent divided by 11.5 percent) of mobile banking adopters used the service. The percentage of consumers who made a text/SMS mobile payment was 3.1 percent in 2010, but the percentage of consumers who made a contactless mobile payment in 2010 was 1.0 percent. The small changes in both of these estimates from 2009 are not statistically significant.

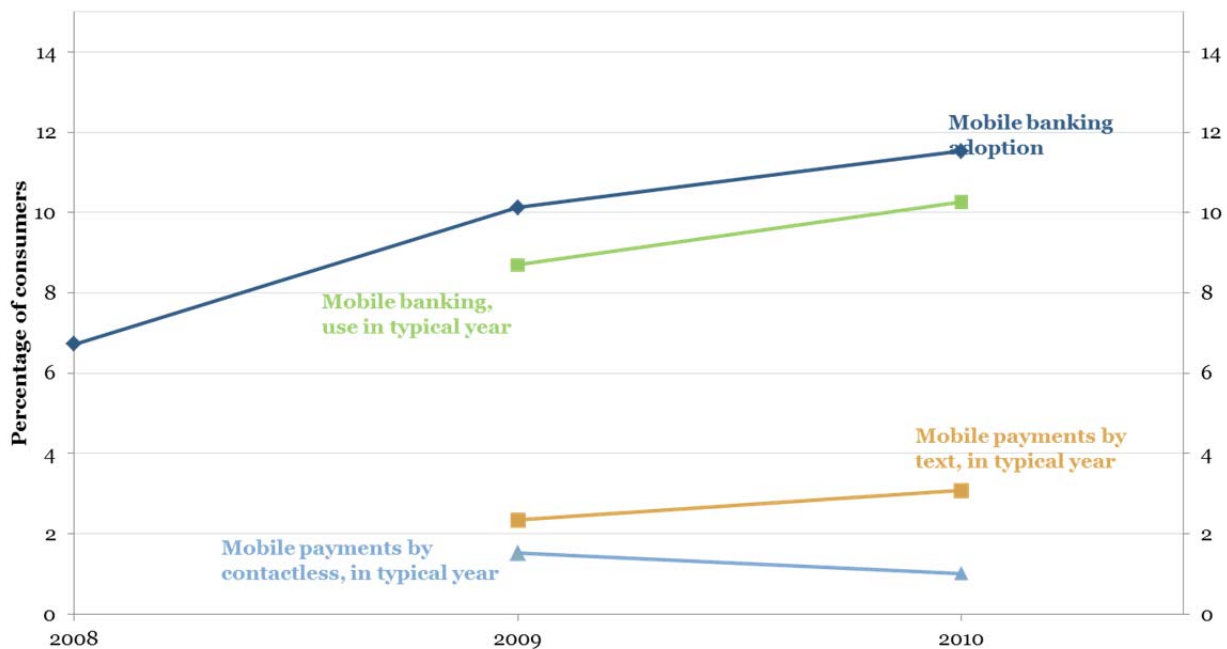


Figure 14 : Mobile banking and payments

Source: 2010 Survey of Consumer Payment Choice, Tables 1 and 13.

The relatively low numbers in Figure 14 are consistent with the early stages of diffusion of new technology and have increased substantially in subsequent years. According to a mobile payment survey in November 2012, the Federal Reserve Board (2013b) estimates that 48.9

percent of consumers had adopted mobile banking by downloading an app and 27.7 percent of consumers had used mobile banking. Both numbers represent large increases over the 2010 SCPC estimates, suggesting that these technologies may have entered the rapid growth stage of adoption and use since 2010.⁴⁰

Diversity and rapid change in technology make it challenging to measure mobile banking and mobile payments accurately and consistently in surveys over time. Because the options for both activities are becoming more complex as technological innovations expand, the SCPC must add more detail and complexity to continue obtaining unbiased estimates. A special measurement problem for surveys like the SCPC is that new technologies are unfamiliar to consumers and change rapidly, so it is difficult to ask questions that will be understood by all survey respondents. Also, in the early stages of technological diffusion the supply of technology tends to lead demand for (adoption of) technology. Because some technologies start to develop and then fizzle out due to weak demand or other challenges, it is risky to invest limited survey resources in questions about them. By early 2013, the Federal Reserve Board's estimates of mobile banking and mobile payments suggest that these technologies may have long-run staying power, so the decision to include them in the SCPC starting in 2008 seems to have been warranted.

VII. New Questions in 2010

Section 1075 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, "Reasonable Fees and Rules for Payment Card Transactions," contains amendments to the

⁴⁰ The "Consumers and Mobile Financial Services" (CMFS) survey was conducted by the Division of Consumer and Community Affairs (DCCA) of the Board of Governors of the Federal Reserve in December 2011/ January 2012 and again in November 2012. The CMFS survey uses some of the same questions about mobile banking and mobile payments as the 2011 and 2012 SCPC, as well as many more-detailed questions on these technologies.

Electronic Funds Act that affected payment markets in important ways.⁴¹ This section of the law eventually became Regulation II, written by the Board of Governors of the Federal Reserve, approved in July 2011, and implemented on October 1, 2011. Most of the debate over Reg II focused on two changes: 1) capping the debit card interchange fee charged by banks at a level below the prevailing market rate at that time; and 2) requiring debit card issuers to offer at least two networks for the merchant to route debit card payments.⁴²

As the Dodd-Frank Act was unfolding, new questions were added to the 2010 SCPC that may eventually help researchers and policy makers better understand the potential impact of the new regulation on consumers. This endeavor is not easy because many details of payment card systems are not well known or understood by most consumers. For example, only 59 percent of consumers were even aware that payment cards involved fees charged to merchants when a consumer paid with a card, and few would have known the magnitude of the fee on their particular card when even merchants who received the card generally did not fully know at the moment of payment.⁴³ Furthermore, the concept of routing a debit card payment along a complex payment card network that involves merchants, processors, and banks is even more arcane and unfamiliar to consumers.

Nevertheless, Reg II has the potential to affect consumers who choose debit card payments, at least indirectly, even if they are unaware of the connection. The most likely way consumers could be affected indirectly is by the method they use to authorize debit card payments—that is, by using a personal identification number (PIN) or a method that does not require a PIN. Because interchange fees prior to Reg II were lower for PIN debit card payments,

⁴¹ Originally, this section was called the “Durbin Amendment” because it was introduced by Senator Richard Durbin (D-Illinois) shortly before the Dodd-Frank Act was approved. The entire law can be found online at <http://www.gpo.gov/fdsys/pkg/PLAW-111publ203/html/PLAW-111publ203.htm>.

⁴² For information and evidence on the Reg II debit interchange fees, see Federal Reserve Board (2011, 2012b, and 2013a). For research about the impact of the regulation, see Shy (2012, 2013), Wang (2013), and Hayashi (2013).

⁴³ For more information about this issue, see Schuh, Shy, Stavins, and Triest (2011).

the policy may have different implications for each of the debit card authorization procedures. Thus, researchers may benefit from knowing how consumers view authorization methods and locations of debit card payments.

A finer distinction, even more subtle to consumers, pertains to the security risks associated with PIN versus no-PIN authorization. Reg II allows a 1-cent-per-transaction increase in debit interchange fees if the card-issuing bank adheres to strong security standards. PIN authorizations generally are considered more secure for the debit card payment system as a whole.⁴⁴ Most of this information and perspective comes from the payment industry. Less is known about the issue of payment security from the perspective of consumers and their experience with loss, theft, and fraud associated with payment instruments. Therefore, the 2010 SCPC includes new questions about consumer experiences with payment security for selected instruments.

The remainder of this section reports results of new questions about consumer experiences with debit and other payment methods that may be related to policy-induced changes in the debit card market. Before proceeding, however, it is important to reiterate that *the results do not provide a direct assessment of the policy implications*. The choice of consumer authorization of debit card payments is not always left entirely to the discretion of consumers, because merchants make decisions that affect the choice, such as whether to provide PIN terminals (or not) at the point of sale. Furthermore, the Dodd-Frank Act and two subsequent legal settlements have made it possible for merchants to steer consumers toward low-cost payment methods using discounting and, for the moment, surcharging.⁴⁵ It does not appear that

⁴⁴ According to Sullivan (2010), “Fraud rates on different payment cards are unequal. Use of a PIN code to identify a cardholder is more secure than using a signature. Countries that rely more heavily on PIN codes for card payments will have less payment fraud. In Australia, for example, approximately 90 percent of debit transactions in 2006 used PIN codes, compared to only about 40 percent in the United States.”

⁴⁵ In 2011, the Department of Justice reached a settlement with Visa and MasterCard over discounting and disclosure of merchant discount fees (<http://www.justice.gov/atr/cases/f273100/273170.htm>). In 2012, merchants (plaintiffs) and

these practices have become widespread yet, but measuring this activity is difficult (see Shy and Stavins 2013). Any effort to identify the effects of debit-card related policies on consumers would require further research.

Debit Card Authorization

As of the fourth quarter of 2010, consumers preferred PIN debit card payments. Figure 15 shows consumers' first choice from among four methods to authorize debit card payments: 1) entering a personal identification number (PIN); 2) signing the card-holder's name (signature); 3) indifference between PIN and signature (either); and 4) neither entering a PIN nor signing.⁴⁶ Almost half of consumers (46 percent) preferred PIN debit authorization and nearly one-third (30 percent) preferred signature debit authorization. One in five consumers (20 percent) was indifferent between entering a PIN and providing a signature.

Visa, MasterCard, and banks (defendants) reached a tentative settlement over interchange fees (see [In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, No. 05-MD-1720, E.D. N.Y.](#) for all documents), which has not received final approval of the U.S. District Court yet but would allow surcharging of card payments in the meantime. For a detailed analysis of the former settlement, see Schuh, Shy, Stavins, and Triest (2011).

⁴⁶ Signature authorization is sometimes called "credit" but is actually still a debit card payment that uses a credit card network such as Visa or MasterCard. The fourth category, neither PIN nor signature, includes at least two other methods: 1) using the debit card number and CVC code, usually online or in other situations where the consumer is not physically present (card-not-present, or CNP); 2) neither signature nor card number and CVC code is available, usually when the transaction is for a sufficiently small dollar value.

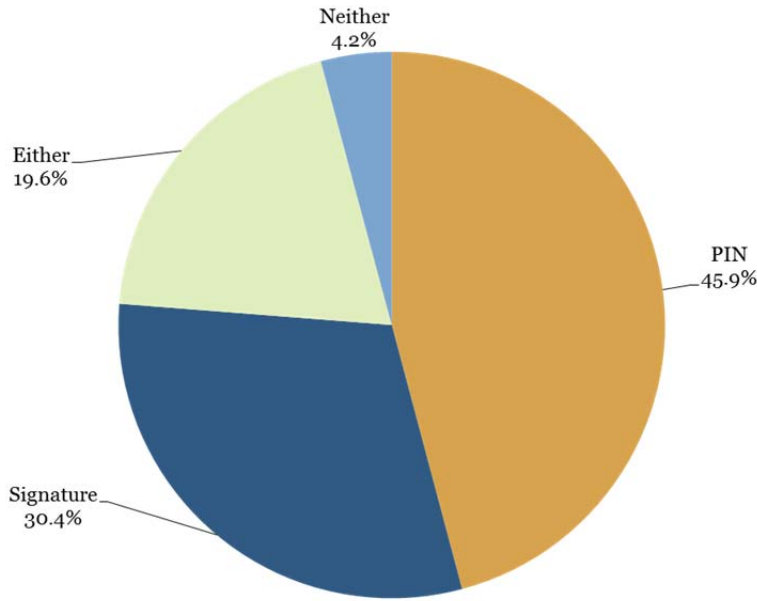


Figure 15: Consumer preferences for authorizing a debit card payment

Source: 2010 Survey of Consumer Payment Choice, Table 29K

Note: Numbers may not sum exactly due to rounding or missing values.

The majority of consumers trust the security of PIN debit, as shown in the blue bars of Figure 16. Security is rated on a 1-to-5 scale from “very risky” (1) to “very secure” (5). Consumers find either of the two primary authorization methods—PIN or signature—to be relatively secure, with 63.8 percent of consumers viewing PIN debit as secure or very secure (blue bars) and 51.4 percent viewing signature debit as secure or very secure. From the perspective of risk, about the same percentage of consumers (20 percent) view PIN and signature debit as risky or very risky (red bars). So, the main difference between these two forms of authorizing debit cards is simply that more consumers view signature as neither risky nor safe, while more view PIN as safe or very safe. Large majorities of consumers think that the lack of authorization (neither PIN nor signature) and online authorization are considerably riskier than either PIN or signature debit.

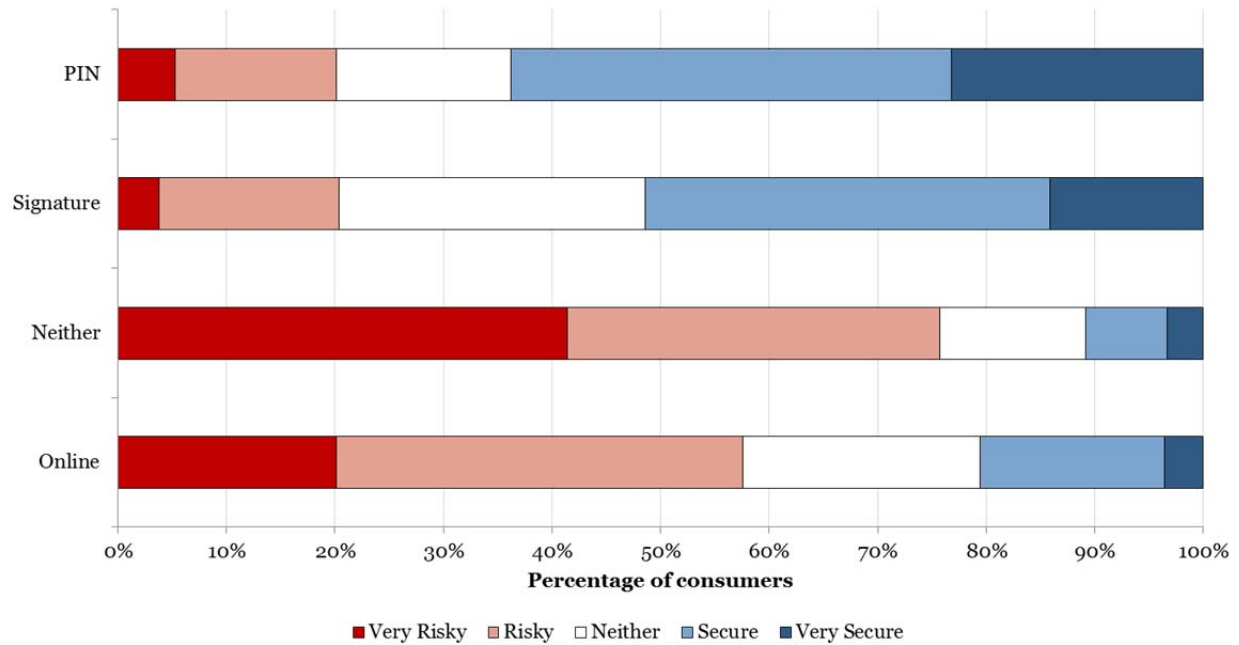


Figure 16: Consumer assessments of debit authorization method

Source: 2010 Survey of Consumer Payment Choice, Table 29J.

Payment Security by Location

Since 2008, the SCPC has included questions about consumers’ assessments of the characteristics of payment instruments (see 2010 SCPC Tables 29A through 29H). One of these characteristics is the “security” of the payment instrument in terms of the potential loss of money or personal information when the instrument is lost or stolen.⁴⁷ A key objective of the new Federal Reserve strategic plan for payments is to improve the security of the payments

⁴⁷ The questionnaire asks: “Suppose a payment method has been stolen, misused, or accessed without the owner’s permission. Please rate the security of each method against permanent financial loss or unwanted disclosure of personal information.”

system. Research shows that most consumer assessments of characteristics are correlated with consumer adoption and use of payment instruments.⁴⁸

A disadvantage of the SCPC characteristic questions is that they do not allow consumers to vary their assessments of the security of a payment instrument over the different locations at which they pay. For example, a consumer may have different views of the security of a credit card swiped through a terminal at a store checkout counter compared to entering the credit card number online at a company's web page. Thus, the characteristic ratings may implicitly reflect a consumer's payment patterns, meaning where he or she most often uses a particular payment instrument. To fully address this shortcoming, it would be necessary to ask the characteristic questions for each payment instrument and payment location simultaneously. With so many characteristics, instruments, and locations, it is not feasible to ask so many questions and still keep the survey to a reasonable length to minimize respondent burden. To partly address the shortcoming of the security characteristics question, the 2010 SCPC included a new question about consumers' assessment of security, in which subjects are asked to rate security by location of payment on a 1-to-5 scale from "very risky" to "very secure."

In 2010, consumers viewed payments made in person as the most secure by far, as shown in Figure 17. Nearly 90 percent of consumers thought payments made in person were either secure or very secure. No other location was rated so securely. The location with the next best security rating was online, a location that almost half of consumers view as secure or very secure. Consumers are most concerned about the security of mobile payments, which more than half of consumers rate as risky or very risky.⁴⁹ Consumers rate the security of payments by mail and telephone (which means authorization by voice/conversation on any type of phone) better than mobile payments but not better than online and far from as good as in-person payments.

⁴⁸ For examples, see Schuh and Stavins (2010, 2013) and Koulayev, Rysman, Schuh, and Stavins (2012).

⁴⁹ See Accenture (2013) for more recent corroborating evidence on consumer concerns about mobile security.

To evaluate consumers' view of the connection between the security of a payment instrument and a payment location, researchers would have to use the individual survey responses found in the publicly available 2010 SCPC data set as the basis for further investigation.

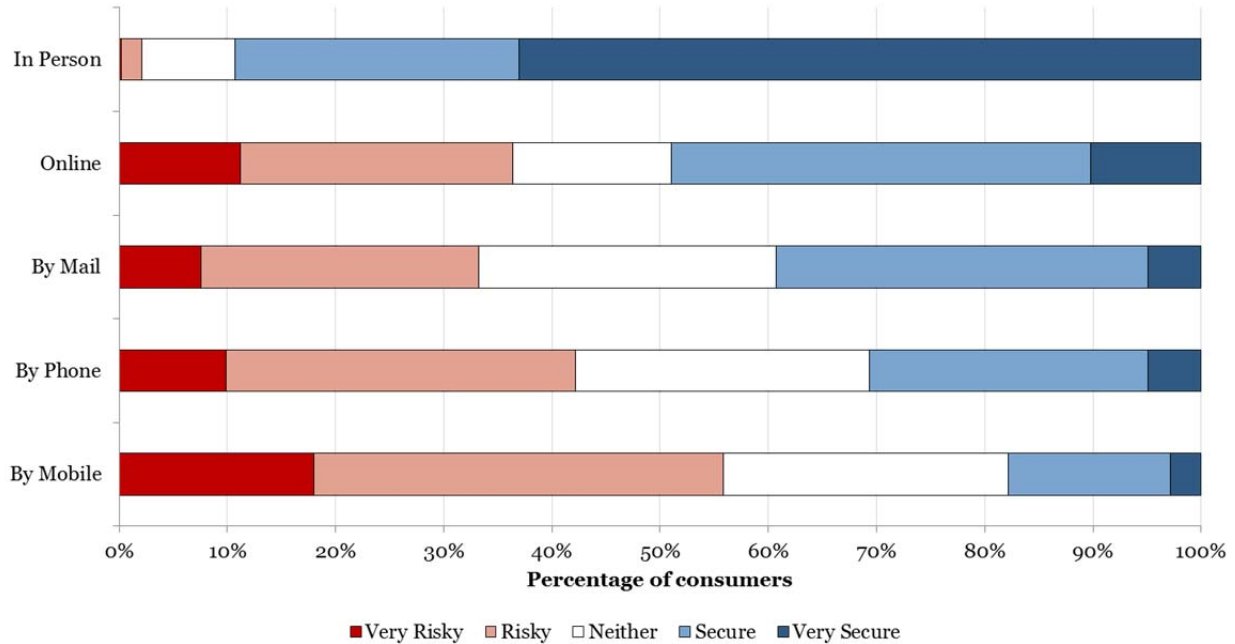


Figure 17: Consumer assessments of security by payment location

Source: 2010 Survey of Consumer Payment Choice, Table 29I.

Notes: By phone refers to payments made by conversation over a phone. By mobile refers to a payment made using the online or text capabilities of a cell phone.

Loss, Theft, and Fraud

Although consumer assessments of security are valuable, information about actual consumer experiences with loss, theft, or fraud is perhaps even more useful. Financial institutions and other payment industry participants have information on these security-related matters for the overall payments market. However, less information of this sort is available for consumers only, and especially by consumer demographic category (for example, by age or

income). So, in 2010, the SCPC included new questions to elicit basic facts about consumers' experiences with loss, fraud, and theft of four common payment instruments: cash, checks, debit cards, and credit cards.⁵⁰

Loss or theft of the four most common payment instruments touched more than one in eight consumers (13.2 percent) who had these instruments in 2010. The left panel of Figure 18 shows that among the four common instruments, adopting consumers were least likely to have had security problems with checks (1.6 percent of check adopters) and most likely to have had security problems with cash (7.3 percent of adopters). Debit and credit card adopters had similar security problems (6.1 and 5.2 percent, respectively).⁵¹

⁵⁰ Respondents were asked to report loss and theft together, rather than separately, because it may be difficult to separate the two incidents accurately and consistently across incidents and survey respondents.

⁵¹ The difference in percentage of credit card adopters and debit card adopters who were victims of loss, theft or fraud, is not statistically significant at the 95 percent significance level.

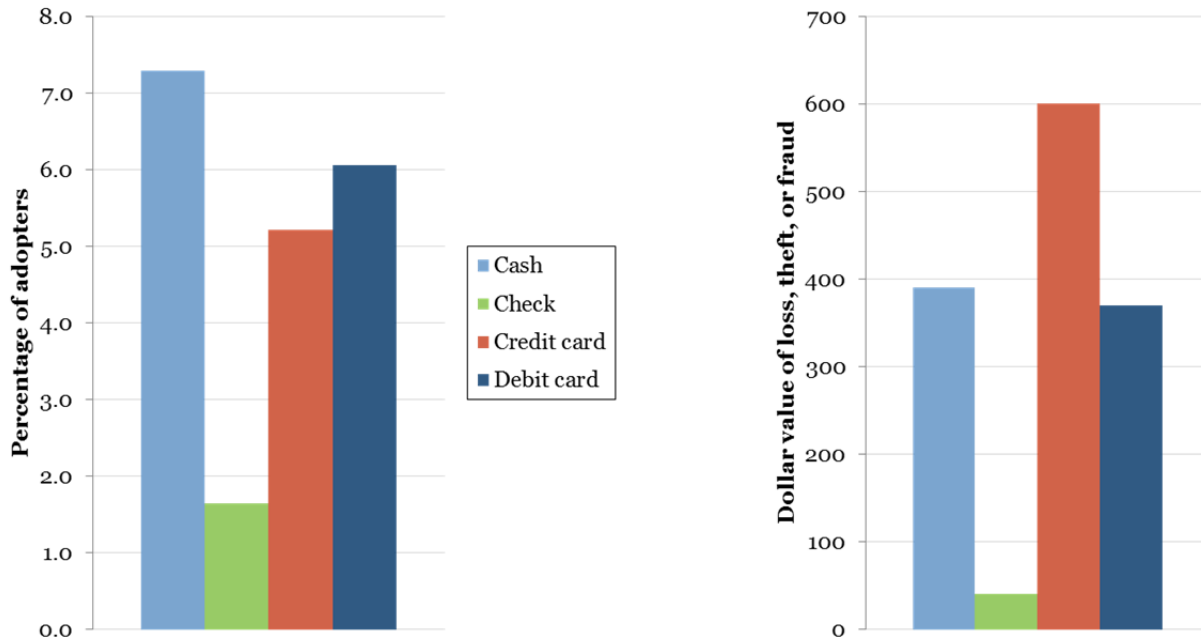


Figure 18: Consumer experience with loss, theft, and fraudulent use of payment instruments

Source: 2010 Survey of Consumer Payment Choice, Table 27.

Note: The left panel shows the share of consumers who had adopted the payment instrument and lost it or had it stolen in the past 12 months. The right panel shows the average value of cash lost or stolen among consumers with cash lost or stolen, and the average value of fraudulent charges among consumers with a lost or stolen check or payment card, in the past 12 months.

In 2010, among consumers whose payment instruments were lost or stolen in the previous 12 months, the amount of money associated with those security problems was greatest for credit cards. As shown in Figure 18, the average amount of fraudulent charges experienced by consumers with lost or stolen credit cards in the preceding 12 months was \$600. By comparison, the average value of fraudulent charges was only \$40 for checks and \$370 for debit cards. Depending on the business relationship between consumers and their banks that issued the checking accounts or payment cards, consumers may not have borne the full amount (or any) of the financial loss associated with these fraudulent charges. On the other hand, consumers who experienced lost or stolen cash in the preceding 12 months had an average of \$391 involved. Given the nature of cash, it is likely that consumers lost most (or all) of this cash value.

VIII. Survey Methodology and Data

Most of the survey methodology for the 2010 SCPC is the same or very similar to that for the 2009 SCPC as documented in Foster, Meijer, Schuh, and Zabek (2011). Like its predecessors, the 2010 SCPC was developed by the Consumer Payments Research Center (CPRC) of the Federal Reserve Bank of Boston and implemented by the RAND Corporation using the American Life Panel (ALP) over multiple months near the end of the calendar year. Table 4 summarizes the key features of the 2008–2010 SCPC. In 2010, the size and composition of the sample was about the same as in 2009 but the timing of the survey was more similar to that of the 2008 survey. The 2010 survey was administered online to members of the ALP who were selected to maximize the number of longitudinal panelists. Median survey completion time continued to be slightly more than 30 minutes. ALP members who participated in the SCPC tended to rate the survey favorably again.

	2008	2009	2010
Primary months (% of completed responses)	Sept–Oct (100%)	Nov–Jan* (98%)	Sept–Nov (97%)
Number of respondents	1,010	2,173	2,102
2008–2010 panelists	788	788	788
2009–2010 panelists	–	1,913	1,913
2008–2009 panelists	876	876	–
Median completion time in minutes	36.5	30.1	33.2
Favorability rating (1 to 5 scale; 1 = “Very interesting”)	2.1	1.9	1.9

Table 4: Summary of the Survey of Consumer Payment Choice, 2008–2010

Source: Authors’ tabulations.

Notes: Asterisk (*) indicates January 2010.

Overall, implementation of the 2010 SCPC was successful in terms of participation and response rates, as in prior years. For more information and analysis of the survey methodology and issues discussed in the rest of this section, see the technical appendix by Angrisani, Foster, and Hitczenko (2013).

Questionnaire Changes

The CPRC is working continually to improve the definitions and measurement of the concepts appearing in the SCPC. Although these innovations and improvements make it more difficult to compare survey results across years, the quality gains are valuable and a necessary part of the early stages of a survey about a new and changing field of study such as consumer payment choice. Also, the number and magnitude of changes in the survey methodology is declining over time.

In 2010, the SCPC questionnaire had fewer changes from the previous year's survey than the questionnaire in 2009. Important revisions were made to the details and definitions related to mobile phones. More questions were added to measure the adoption of smart phones and other phone features, such as text message plans and web browsing capability. The mobile banking and mobile payments section was also expanded to capture recent developments in the industry. Two payment instrument characteristics—(1) acquisition and setup cost and (2) record keeping—were dropped in 2009 to save time but were reinstated in the 2010 questionnaire because they are important for research. Respondents also were asked to assess new aspects of payments, including the security of payment locations, and the security and preferences pertaining to PIN and signature debit card payments, as discussed in Section VII. Finally, details were added to the prepaid card section to better assess consumers' adoption and management of the cards.

Data Issues

The SCPC results in the official tables of this report reflect several features about data transformations that readers and data users should keep in mind:

- *Seasonal adjustment* – No seasonal adjustment has been made to the data yet. As Table 4 shows, the calendar time period of implementation of the 2008, 2009, and 2010 surveys differs from survey to survey. If there are important monthly seasonal differences in consumer payment behavior, this different survey timing may affect the comparability

of the SCPC results across years, especially with respect to growth rates or changes. Consequently, the reported changes and growth rates for the aggregate SCPC data may be revised after seasonal adjustment. The CPRC is continuing to study this issue.

- *Inflation adjustment* – All dollar value responses are measured in current values; no adjustment for inflation has been made yet. SCPC data in real (inflation-adjusted terms) may be provided in the future. Readers and data user may adjust the nominal dollar values in the SCPC by using a suitable aggregate price index like the consumer price index.
- *Data evaluation and cleaning procedures* – Major revisions and improvements have been made to the procedures used to evaluate the consistency and reliability of survey responses. Previously, these procedures were conducted independently on a year-by-year basis. Beginning in 2010, these procedures took account of survey response data for all respondents and all years (2008–2010), yielding a total of more than 5,000 respondent-year observations, and employed enhanced statistical methodology to evaluate and clean the data. As a result, data for all years reported in dollar values or units (for example, number of payments) have been revised, including those for 2008–2009. Response rates have remained relatively high throughout the period studied in the SCPC program. However, missing values due to item nonresponse have not yet been imputed in the public-use data set.

Data Revision

Readers of the tables will notice a superscripted “r” next to the columns for the 2008 and 2009 estimates, indicating that the data in the affected columns may have been revised since the last time the 2008 or 2009 SCPC results tables were published. The main reason for the changes is that a new weighting scheme was applied retroactively to the earlier SCPC results. In addition, a new outlier cleaning procedure was applied retroactively to the payment use and cash holdings numbers from 2008 and 2009. For more information on the change in the weighting protocol, see Angrisani, Foster, and Hitczenko (2013).

Electronic Payments Benchmarking

SCPC measurement of consumer electronic payments can potentially be compared with comprehensive, reliable data from external sources for validation and benchmarking.⁵² NACHA (The Electronic Payments Association) tracks the universe of electronic payments by collecting data from the two electronic clearing houses—FedACH, run by the Federal Reserve System, and the Electronic Payments Network (EPN), run by The Clearing House (TCH).⁵³

In principle, NACHA can identify all consumer-related electronic payments separately from electronic payments by business and government. According to NACHA rules, banks and other financial institutions involved in electronic payments must follow very specific accounting and classification procedures when handling electronic payments. Electronic payments are assigned to specific categories called standard entry class (SEC) codes, which define various types of payments. This SEC coding separates consumer-related electronic payments from others and assigns them to detailed categories of consumer electronic payments, which can then be compared with the SCPC estimates of consumer electronic payments.⁵⁴

For 2009–2010, the SCPC number of consumer electronic payments (OBBP + BANP) per month is close to the corresponding estimate from NACHA, as shown in Figure 19, despite some definitional differences in the two measures. In 2008, however, the SCPC estimate of consumer electronic payments is about one third higher than the NACHA estimate. This larger

⁵² We thank NACHA CEO Janet Estep for bringing to our attention the potential of benchmarking the SCPC data to the NACHA data. We also thank Jane Larimer, Colleen Morrison, and Scott Lang of NACHA for their time and effort to help us reconcile the two data sources. Claire Greene of the CPRC contributed prominently to the ideas and results in this subsection.

⁵³ For more information on FedACH, see <http://frbervices.org/fedach/>, and for more details on EPN, see <http://www.epaynetwork.com/home.php>.

⁵⁴ For more information about NACHA's operating rules see <https://www.nacha.org/achrules>. The NACHA SEC codes CIE, PPD debit, TEL, and WEB are the closest to the SCPC concepts of OBBP and BANP. However, the NACHA and SCPC concepts are not exactly the same. It is possible to improve the matching of the SCPC and NACHA data on consumer electronic payments, but doing so would require NACHA to receive information from the two ACH operators at a more detailed level of reporting than is currently provided. The CPRC is working with NACHA to refine the analysis and matching of the data sources and will release additional details in the future.

discrepancy is not yet well explained, but there are at least two potential explanations. First, the 2008 SCPC questionnaire had a different definition of BANP than it had in 2009–2010, so it is possible that the change in the questionnaire improved the accuracy of the SCPC estimate. Second, there are also unresolved differences in the matching of the SCPC and NACHA data that, once resolved, may reduce the discrepancy between the two estimates. In the meantime, the change in SCPC consumer electronic payments from 2008 to 2009 should be viewed circumspectly and should not be regarded as comparable to the change from 2009 to 2010.

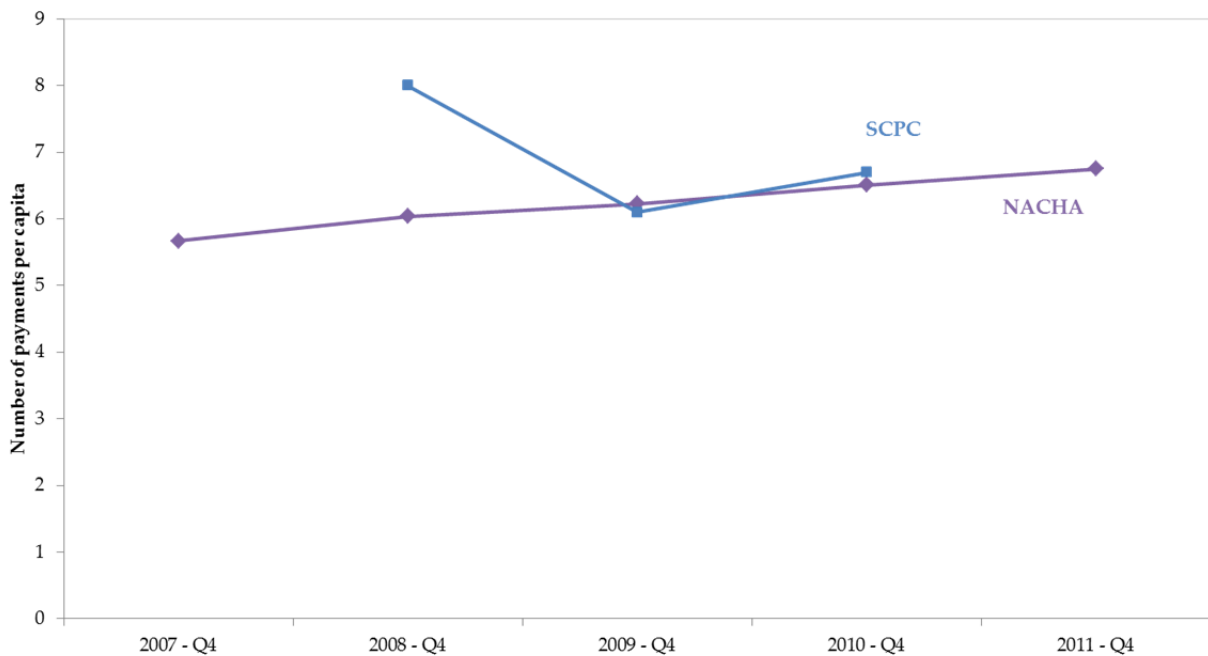


Figure 19: Comparison of SCPC and NACHA estimates of consumer electronic payments per capita per month

Source: Survey of Consumer Payment Choice, NACHA.

Relationship between Number of Payments and Consumption

As noted in the discussion of Figure 1, the number of payments by consumers in the SCPC and real consumption in the National Income Accounts are different measures of consumer spending. There are at least two potentially substantive differences between these

two measures: 1) the types of spending included (consumption versus nonconsumption) and 2) the units of measurement of consumption spending.

First, people make payments for many types of goods and services that are called consumption, but also for other things that are not included in the economic definition of consumption. One important example is that consumption includes the imputed rental value of home ownership, which is not a consumer payment, but home-owning consumers make mortgage payments (which do not necessarily equal imputed rental services). More generally, consumers make payments for debt service, person-to-person payments, undocumented services (such as babysitting), and other things that are not included in the economic definition of consumption.

The other potential difference is that consumption is measured in terms of the value of spending while payments are measured in terms of the number of times a consumer pays for something. Table 5 illustrates a hypothetical example of how the units of measurement for consumption and payments differ for an individual consumer. Real (inflation-adjusted) consumption represents the quantity of goods and services purchased for personal consumption. In contrast, the number of payments represents the number of times that consumers make payments when they buy goods and services, which can occur as a single item or for a group of items such as a shopping basket. As Table 5 indicates, suppose that real consumption increases over time, as it usually does, in this case by 2 percent from one year (\$100) to the next (\$102). Then, the number of payments could stay the same (scenario 2), or increase (scenario 3) or decrease (scenario 1), even though real consumption increased by 2 percent in each scenario. In scenario 2, the number of payments is not correlated with consumption, while in scenario 3 the number of payments is positively correlated with consumption (and vice versa for scenario 1).

	Values of Payments	Number of payments	Total consumption
Year 1	\$50, \$50	2	\$100
Year 2			
Scenario 1: <i>Consumption increases, number of payments decreases</i>	\$102	1	\$102
Scenario 2: <i>Consumption increases, number of payments stays the same</i>	\$51, \$51	2	\$102
Scenario 3: <i>Consumption increases, number of payments increases</i>	\$34, \$34, \$34	3	\$102

Table 5: Hypothetical examples depicting the relationship between number of payments and consumption

Source: Authors' calculations.

Note: Dollar values are assumed to have been adjusted for inflation.

A second way the number of payments differs from real consumption is that some consumer payments are made for items that are not classified as consumption in the National Income Accounts. For example, consumption includes an estimate of the rental equivalent of home ownership, although consumers who own homes may make mortgage payments that do not necessarily equal the imputed rent calculation in consumption. Consumers also make payments to other consumers for undocumented services (such as babysitting) or in repayment of private debts, neither of which is included in consumption. These and other examples reflect differences in the concepts of payments and consumption.

To summarize, real consumption and the number of consumer payments may be correlated over time but the concepts differ in important ways. Thus, payments and consumption should not be expected to move in exactly the same way over time, especially at the level of individual consumers. In the aggregate, common factors among consumers may produce business cycle correlation between payments and consumption. However, there is still very little theoretical research about this relationship or empirical evidence on the actual correlation. Therefore, it is not possible to draw firm conclusions about the cyclical relationship between aggregate consumption and the number of payments until more data and research become available.

Public-Use Data and Documentation

Along with this report, the CPRC is releasing a public-use microdata set that can be downloaded by the public free of charge.⁵⁵ The dataset contains all of the 2010 survey responses at the individual-respondent level, with all data cleaning and adjustments done by the CPRC, provided in multiple formats (SAS, Stata, and CSV). The SCPC data web site also contains the 2010 survey questionnaire, a codebook for data users, and standard errors corresponding to the estimates in Tables 1-33.⁵⁶ The data codebook includes tabulations of the results for all survey questions and variables.

The CPRC strongly recommends that users of the SCPC data read the Data User Manual and Technical Appendix (Angrisani, Foster, and Hitczenko 2013) for detailed instructions.⁵⁷ In particular, users should refrain from converting SCPC estimates for the average consumer to aggregate estimates for all U.S. consumers by multiplying SCPC data and the adult population.⁵⁸ More research and development of the SCPC sampling weights, currently ongoing, are still needed to ensure that the aggregate estimates are properly benchmarked to other sources of aggregate payments data. For more details, see Appendix D in Foster, Meijer, Schuh, and Zabek (2011).

Some data users may wish to combine the three available survey datasets (2008–2010) to create a longitudinal panel for research. The CPRC recommends that data users who do so be acutely aware that changes in survey questions over time can make some variables

⁵⁵ The data are available from <http://www.bostonfed.org/economic/cprc/SCPC/index.htm>

⁵⁶ Additional information can be obtained from the Consumer Payments Research Center of the Boston Fed at the SCPC website or by contacting the individuals listed in the contact page at the beginning of this report.

⁵⁷ <http://www.bostonfed.org/economic/cprc/SCPC/index.htm>

⁵⁸ This recommendation applies to the average number of payments per month, the average value of cash holdings, the average number of credit or debit cards, and other similar types of estimates.

incomparable between years (these are indicated by the italicized numbers in the official tables). The CPRC plans to release an official longitudinal dataset will document and adjust for these differences in the future. The longitudinal dataset will also include longitudinal sample weights; ongoing research is being conducted to find the best methodology to construct these longitudinal weights.

In addition to the dataset on the Boston Fed website, we also include a link to the RAND data website, where the user can download the raw, unedited data. These data can be easily merged with the Boston Fed's dataset. For information on how to merge the two datasets, see the Technical Appendix (Angrisani, Foster, and Hitczenko 2013).

IX. Conclusions

The 2010 SCPC provides an updated snapshot of U.S. consumer payment choices that reflects widespread diversity and the influence of new payment innovations but also a persistent reliance on cash. When combined with similar data from two earlier years, the SCPC begins to suggest trends in consumer payments. However, it is important to refrain from drawing conclusions about consumer payment trends at this juncture given the short time period. Furthermore, the years of 2008–2010 were tumultuous because of the financial crisis and the unusually severe recession. Even in normal economic times, however, trends estimated on three years of data are still too short and sometimes estimated too imprecisely to enable one to draw strong conclusions. Therefore, consumers' increased use of cash through 2010 and the rebound in consumers' use of credit cards and bank account numbers for payment should continue to be interpreted circumspectly until more years of data are available.

Consumer use of mobile banking and mobile payments appears to have been expanding through 2010 in line with typical patterns of technology diffusion that have continued through at least 2012. Consumer use of prepaid cards has expanded through 2010 in some regards (extensive margin) but not all (intensive margin), so the future of prepaid cards is less clear at this juncture. Consumers have different preferences for authorization of debit card payment,

but without additional research it is not known whether Regulation II may have had any meaningful or identifiable impact on consumer payment choices. Consumers assess the quality of payment security in diverse ways across not only payment instruments but also payment locations.

The overall picture of consumer payments that emerges from the 2008 to 2010 SCPC may provide useful information and background for assessing potential policy changes, such as Regulation II, the CFPB’s proposed rulemaking on prepaid cards, and the Federal Reserve’s new strategic plan for the U.S. payment system. However, firm conclusions about policy implications cannot be drawn from the official tables alone. Most likely, much more research is needed using individual consumer responses to be able to draw such policy implications and certainly to develop more effective policies.

X. Definitions and concepts

This section contains a complete set of tables with the exact definitions of concepts used in the Survey of Consumer Payment Choice (SCPC) questionnaire and in the construction of the official tables of statistics. For more information, consult the 2010 SCPC questionnaire available online.

Definitions Table 1 – Banking Concepts

Concept	Definition
Assets	Any item of monetary value, such as bank accounts, real estate, stocks, bonds, annuities, retirement accounts, motor vehicles, jewelry, rare or collectable 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 other related banking transactions.

Concept	Definition
ATM card	An ATM card is a card that allows you 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, including regular or Internet-based commercial banks, credit unions, and savings and loans.
Checking account	A demand deposit account at a bank from which a customer can make an essentially unlimited number of withdrawals or payments by check, among other methods.
Mobile banking	A method of accessing your bank account using a mobile device. This can be done either by accessing your bank's web page through the web browser on your mobile device, via text messaging or SMS, or by using a downloadable application on your mobile device.
Money market account	An account that is similar to a regular savings account, but it usually pays higher interest, has higher minimum balance requirements, and only allows three to six withdrawals per month. Also, many money market accounts will allow a small number of checks each month.
Nonbank online payment account	A payment service provided by a company that is not a bank. These services allow a consumer to send and receive money online. Examples of nonbank online payment services include PayPal, Google Checkout and Amazon Payments.
Online banking	A transaction conducted on the website of a bank, such as viewing account balances, making transfers between accounts, or paying bills electronically (see Bank Account Number Payment for additional definitions).
Savings account	A time deposit account at bank from which a customer can make a limited number of withdrawals or payments each month by a variety of methods except by check.
Telephone banking	A method of accessing your account by calling a phone number that your bank has provided. You interact with the system using either voice commands, your phone's numeric keypad, or speaking with a live customer service representative.

Definitions Table 2 – Payment Instruments

Concept	Definition
Bank account number payment (BANP)	A payment made by providing your bank account number to a third party, such as your employer or a utility company. You can give your number on websites, paper forms, etc. You do not have to visit your bank’s website to make these payments.
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 that will be paid back to the credit card company later.
Debit card	Also called a check card. A type of card that allows the cardholder to make purchases or payments in addition to allowing access to the cardholder’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 bill payment made directly from your bank’s online banking website. This payment does not require you or your bank to disclose your bank account number to a third party.
Prepaid card	A card that has money stored or loaded onto the card. Also known as stored value cards or gift cards.
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.

Definitions Table 3 – Adoption

Concept	Consumer Behavior that Defines Adoption
ATM card*	Has a bank account and has an ATM card.
Bank account	Has at least one checking account, savings account or money market 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 check to make a payment at least once in the past 12 months, currently have 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 bank account and 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 market account	Has at least one money market account
Money order	Has used a money order in the past 12 months or uses money order in a typical year.
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.

Concept	Consumer Behavior that Defines Adoption
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.
Traveler's check	Has used a traveler's 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 does 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, they 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 paid directly from your income.

Concept	Definition
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 utility company for energy services provided during a month payment or a payment to service a loan such as a mortgage payment. Most bill payments occur at regular frequencies such as a week, month or year.
By mail, in person, or by phone bill payment	A bill payment made by mail, in person, or over the phone.
Online bill payment (OBP)	A bill payment made using the Internet, either via the website of a bank, company, or other institution that sent the bill, or via a payment intermediary such as PayPal. Consumers make an OBP at their discretion and as needed, not automatically. An OBP can be made via bank account number payment (BANP), online banking bill payment (OBBP), or debit or credit card.
Online payment (OP)	A payment (other than payment of a bill) made for an online transaction or transfer of funds. The purchase or transfer initiated either via the website of a seller of goods and services or other institution, or via a payment intermediary, such as PayPal. Consumers make an OP at their discretion and as needed. Included in this definition are payments made via check or money order (sent by mail) as well as payments made via debit or credit card or via bank account number payment (BANP), so long as the payment is made in connection with transaction initiated online.
Person-to-person payment	Transfers or transactions made between two private individuals. Examples include payments for babysitting or allowances, paying a person for something that is not business related, and account to account payments from your bank account to another person's bank account.
Retail payment	A payment made in person to buy basic goods from retail outlets while shopping, including: food and grocery stores, restaurants; superstores, warehouses, and club stores; drug or convenience stores; gas stations; department stores; electronics, hardware and appliance stores; home goods and furniture stores.

Concept	Definition
Services and other payments	A payment made in person by a consumer for services such as: transportation and tolls; medical, dental, health and fitness; education and child care; personal care (for example, hair); recreation, entertainment, and travel; maintenance and repairs; other professional services (business, legal, etc.); charitable donations.

Definitions Table 6 – Payment Instrument Characteristics

Concept	Definition
Acceptance for payment	Please rate how likely each payment method is to be ACCEPTED for payment by stores, companies, online merchants, and other people or organizations.
Convenience	Please rate the CONVENIENCE of each payment method. <i>Examples: speed, record keeping, control over payment timing, ease of use, effort to carry, get or set up, ability to keep or store.</i>
Cost	Please rate the COST of using each payment method. <i>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.</i>
Getting & setting up	Rate the task of GETTING & SETTING UP each payment method before you can use it. <i>Examples: getting cash at the ATM, length of time to get or set up, paper work, learning to use or install it, or travel.</i>
Payment records	Rate the quality of PAYMENT RECORDS offered by each method of payment. Consider both paper and electronic records. <i>Examples: proof of purchase, account balances, spending history, usefulness in correcting errors or dispute resolution, and ease of storage.</i>
Security	Suppose a payment method has been stolen, misused, or accessed without the owner’s permission. Rate the SECURITY of each method against permanent financial loss or unwanted disclosure of personal information.

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 allowing 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, or Smart Tag. The payment can be made from a bank account, by credit card, and sometimes 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.
Key fob	A contactless payment technology that attaches to your 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 your bank provides when you make a transaction that exceeds your account balance. It covers the difference between the transaction amount and your account balance, and therefore you will avoid 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 your checking account, or through overdraft insurance for instance.
Overdraft	Withdraw 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.

Concept	Definition
Paid directly from income	A payment made for a consumer by an employer or other income provider directly from the consumer's wages and salaries or other income payments (such as interest and dividends, social security payments, retirement plan distributions, alimony, child support, welfare, trust fund distributions, and other money received).
Reward	Any type of benefit given to payment cardholders when they use their cards 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.
Texting	Respondent has cell phone that is able to send or receive text messages.
Text/SMS with no texting plan	Respondent can send and receive text messages, but does not have a monthly text message plan.
Text/SMS with texting plan	Respondent has a monthly text message plan.
Web browsing	Respondent has cell phone which has web browsing capabilities.
Smart phone	Respondent has a smart phone. Examples are given as iPhone, Android, or BlackBerry.

XI. SCPC Board of Advisors

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Table 1
Current Ownership of Accounts and Account Access Technologies
 Percentage of consumers

	2008 ^r	2009 ^r	2010
Bank accounts	93.5	91.8	92.7
Checking.....	90.3	90.1	91.9
Savings.....	77.4	74.3	72.7
Traditional or passbook.....	na	69.4	68.3
Money market.....	na	28.5	23.6
With check privileges.....	na	16.0	14.6
Bank account features			
Primary checking account with earned interest.....	48.8	46.9	52.3
Overdraft protection.....	52.3	72.1	75.0
Bank account access technologies			
Blank paper checks.....	na	84.2	87.0
ATM or debit card.....	84.4	82.1	83.4
ATM card.....	25.6	35.4	42.2
Debit card.....	79.6	75.0	78.4
Telephone banking.....	42.7	41.1	37.7
Online banking.....	69.4	64.0	68.0
Mobile phone.....	na	89.0	92.2
Smart phone (iPhone, Android, BlackBerry, etc.).....	na	na	26.7
Mobile banking.....	6.7	10.1	11.5
Nonbank payment accounts			
Online payment service provider.....	na	29.6	29.7

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in *italics* are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 2
Historical Ownership and Discarding of Accounts and Account Access Technologies
 Percentage of consumers

	Ever owned	2008^r	2009^r	2010
Bank accounts		97.5	98.7	98.4
Checking.....		95.9	98.1	97.9
Savings.....		95.4	95.6	95.3
Traditional or passbook.....		na	95.0	94.9
Money market.....		na	40.7	37.7
Money market with check privileges.....		na	na	na
Bank account features				
Primary checking account bears interest.....		na	na	na
Overdraft protection.....		na	na	na
Bank account access technologies				
Blank paper checks.....		na	na	na
ATM or debit card.....		91.6	92.3	92.3
ATM card.....		59.4	69.0	69.9
Debit card.....		85.4	84.7	86.4
Telephone banking.....		49.9	50.1	na
Online banking.....		71.8	71.9	75.9
Mobile banking.....		na	11.3	13.7
Nonbank payment accounts				
Online payment service provider.....		na	na	na
	Discarded*	2008^r	2009^r	2010
Bank accounts		4.0	6.9	5.6
Checking.....		5.5	8.0	6.0
Savings.....		18.1	21.4	22.6
Traditional or passbook.....		na	25.6	26.5
Money market.....		na	12.0	14.1
Money market with check privileges.....		na	na	na
Bank account features				
Primary checking account bears interest.....		na	na	na
Overdraft protection.....		na	na	na
Bank account access technologies				
Blank paper checks.....		na	na	na
ATM or debit card.....		7.1	10.3	8.8
ATM card.....		33.7	29.8	27.7
Debit card.....		5.8	9.6	7.9
Telephone banking.....		7.3	8.8	na
Online banking.....		2.3	7.8	7.8
Mobile banking.....		na	0.7	1.4
Nonbank payment accounts				
Online payment service provider.....		na	na	na

* "Discarded" refers to the difference between historical and current ownership rates.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in *italics* are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 3
Primary Bank Account Holdings, by Type of Account and Financial Institution

Percentage of consumers	2008 ^r	2009 ^r	2010
Primary checking account			
Commercial bank.....	<i>68.0</i>	62.0	63.1
Savings and loan.....	<i>1.4</i>	6.9	6.9
Credit union.....	<i>18.6</i>	18.5	18.1
Brokerage.....	na	0.2	0.4
Internet bank.....	<i>0.6</i>	0.9	0.6
Other.....	<i>0.8</i>	0.8	2.0
Primary savings account			
Commercial bank.....	<i>44.9</i>	33.9	35.0
Savings and loan.....	<i>1.3</i>	5.3	5.3
Credit union.....	<i>25.2</i>	24.5	22.1
Brokerage.....	na	1.5	1.0
Internet bank.....	<i>2.1</i>	2.4	1.6
Other.....	<i>1.2</i>	0.5	1.3
Percentage of account adopters*	2008 ^r	2009 ^r	2010
Primary checking account			
Commercial bank.....	<i>76.2</i>	69.4	69.3
Savings and loan.....	<i>1.5</i>	7.8	7.6
Credit union.....	<i>20.8</i>	20.7	19.9
Brokerage.....	na	0.2	0.4
Internet bank.....	<i>0.6</i>	1.0	0.7
Other.....	<i>0.9</i>	0.9	2.2
Primary savings account			
Commercial bank.....	<i>60.1</i>	49.7	52.7
Savings and loan.....	<i>1.8</i>	7.8	8.0
Credit union.....	<i>33.7</i>	36.0	33.2
Brokerage.....	na	2.2	1.5
Internet bank.....	<i>2.8</i>	3.5	2.5
Other.....	<i>1.6</i>	0.7	2.0

* Adopters are respondents who have identified themselves as owning and/or using that type of account. For example, 69.3% of checking account adopters identified "commercial bank" as the location of their primary checking account in 2010.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in *italics* are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

2010 Survey of Consumer Payment Choice

Table 4
Current Adoption of Payment Instruments*
 Percentage of consumers

	2008^r	2009^r	2010
Paper instruments	98.0	100.0	100.0
Cash†.....	97.9	99.9	100.0
Check.....	90.3	84.2	87.0
Money order‡.....	19.2	27.3	23.6
Traveler's check‡.....	4.3	6.7	6.2
Payment cards	93.0	93.3	94.1
Debit.....	79.6	75.0	78.4
Credit.....	77.7	70.6	70.3
Prepaid.....	17.5	32.5	38.2
Electronic payments	80.2	71.4	75.7
Online banking bill payment.....	50.9	47.6	48.7
Bank account number payment‡.....	73.4	55.8	64.8
Other means of payment			
Direct deduction from income‡.....	20.9	16.8	17.5

* Adoption means the consumer had the instrument, unless otherwise noted.

† 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 the given year

‡ Adoption means the consumer used the instrument or method in a given year.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in *italics* are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values.

Table 5
Historical Adoption and Discarding of Payment Instruments*
 Percentage of consumers

	Ever adopted	2008 ^r	2009 ^r	2010
Paper instruments				
Cash [†]		na	na	na
Check.....		na	na	na
Money order [‡]		na	81.8	81.1
Traveler's check [‡]		na	55.5	54.5
Payment cards				
Debit.....		85.4	84.7	86.4
Credit.....		91.8	87.7	87.4
Prepaid.....		46.0	63.8	65.3
Electronic payments				
Online banking bill payment.....		56.6	57.6	57.1
Bank account number payment [‡]		na	na	na
Other means of payment				
Direct deduction from income [‡]		na	na	na
	Discarded**	2008 ^r	2009 ^r	2010
Paper instruments				
Cash [†]		na	na	na
Check.....		na	na	na
Money order [‡]		na	54.5	57.5
Traveler's check [‡]		na	48.9	48.3
Payment cards				
Debit.....		5.8	9.6	7.9
Credit.....		13.8	17.0	17.1
Prepaid.....		28.5	28.8	27.0
Electronic payments				
Online banking bill payment.....		4.9	7.6	5.3
Bank account number payment [‡]		na	na	na
Other means of payment				
Direct deduction from income [‡]		na	na	na

* Adoption means the consumer had the instrument, unless otherwise noted.

† 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 the given year

‡ Adoption means the consumer used the instrument in a given year.

** "Discarded" refers to the difference between historical and current adoption rates.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in *italics* are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 6
Current Adoption of Payment Instruments, by Instrument Features*
 Percentage of consumers

	2008 ^r	2009 ^r	2010
Debit cards	79.6	75.0	78.4
Rewards.....	22.8	21.5	25.6
Credit cards†	77.7	70.6	70.3
Rewards.....	61.8	52.8	53.8
Nonrewards.....	52.9	41.8	42.5
General purpose.....	na	65.7	65.3
Rewards.....	na	45.7	47.3
Nonrewards.....	na	32.8	31.1
Charge.....	na	15.8	16.1
Rewards.....	na	8.6	8.7
Nonrewards.....	na	6.3	6.0
Branded.....	na	39.5	44.2
Rewards.....	na	21.2	23.6
Nonrewards.....	na	20.0	23.9
Prepaid cards‡	17.5	32.5	38.2
General purpose.....	na	19.4	25.9
Merchant specific.....	na	15.4	19.0
Payroll**.....	na	2.0	2.3
Government issued.....	na	na	5.5
Electronic benefits transfer (EBT)**.....	na	7.8	na
Reloadable.....	na	15.2	14.1
Bought for own use.....	6.4	na	na
Received from others.....	13.8	na	na
Both bought and received.....	2.8	na	na
Contactless	44.4	23.2	28.2
Debit card.....	19.2	10.4	12.4
Credit card.....	24.7	9.5	9.2
Prepaid card.....	4.7	2.0	3.1
Electronic toll payment.....	9.9	8.3	11.9
Key fob.....	1.7	1.9	1.6
Mobile phone††.....	na	1.5	1.0

* Adoption means the consumer had the instrument, unless otherwise noted.

† 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. Charge cards require full payment of the balance at the end of each billing period.

‡ 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.

** Payroll cards and EBT cards may also be general purpose cards.

†† Adoption means the consumer used the instrument in a given year.

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Table 7
Number of Adopted Bank Accounts and Payment Cards*
 Mean number per adopter†

	2008 ^r	2009 ^r	2010
Bank accounts	2.8	3.2	2.9
Checking.....	1.5	1.5	1.5
Savings.....	na	2.1	1.9
Traditional or passbook.....	<i>1.7</i>	1.6	1.5
Money market.....	na	1.6	1.3
Money market with check privileges.....	na	na	na
Nonbank payment accounts			
Online payment service provider.....	na	2.1	2.2
ATM and debit cards			
ATM.....	<i>1.3</i>	1.3	1.4
Debit.....	1.5	1.3	1.4
Credit Cards‡	3.5	3.7	3.9
Rewards.....	2.3	2.0	2.1
Nonrewards.....	2.5	1.8	1.8
General purpose	na	2.1	2.1
Rewards.....	na	1.3	1.4
Nonrewards.....	na	1.2	1.1
Charge	na	0.4	0.4
Rewards.....	na	0.2	0.2
Nonrewards.....	na	0.2	0.2
Branded	na	1.3	1.5
Rewards.....	na	0.7	0.7
Nonrewards.....	na	0.8	1.0
Prepaid cards**	2.4	2.4	1.7
General purpose.....	na	1.0	0.7
Merchant specific	na	1.1	0.9
Payroll††.....	na	0.1	0.0
Government issued.....	na	na	0.1
Electronic benefits transfer (EBT)††.....	na	0.3	na
Bought for own use.....	0.6	na	na
Received from others.....	1.7	na	na

*Adopters are respondents who have identified themselves as owning and/or using that type of account.

† Bold-face numbers are per adopter of the instrument. The denominator for each of the subcategories is the number of adopters of the bold-faced instrument.

‡ 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. Charge cards require full payment of the balance at the end of each billing period.

** 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.

†† Payroll cards and EBT cards may also be general purpose cards.

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Table 8
Mean Number of Payment Instruments Adopted*

All consumers	2008^r	2009^r	2010
Available number of payment instruments[†]	9	9	9
Total	5.1	5.0	5.2
Paper instruments.....	2.1	2.2	2.2
Card instruments.....	1.7	1.8	1.9
Electronic instruments.....	1.2	1.0	1.1
Adopter status	2008^r	2009^r	2010
Bank account nonadopters	1.3	2.2	1.9
Bank account adopters	5.4	5.3	5.5
Checking and savings account adopters.....	5.5	5.4	5.5
Checking account adopters, no savings.....	5.0	5.0	5.3
Savings account adopters, no checking.....	3.2	3.3	3.0
Paper instrument adopters	5.2	5.0	5.2
Cash adopters [‡]	5.2	5.0	5.2
Check adopters.....	5.4	5.3	5.5
Money order adopters**.....	5.4	5.1	5.5
Traveler's check adopters**.....	6.7	6.5	6.5
Payment card adopters	5.4	5.3	5.4
Debit adopters.....	5.6	5.6	5.7
Credit adopters.....	5.6	5.5	5.7
Prepaid adopters.....	6.0	5.8	6.0
Electronic payment adopters	5.7	5.7	5.8
Online banking bill payment adopters.....	6.0	6.0	6.1
Bank account number payment adopters**.....	5.7	5.9	5.9

*Adoption means the consumer had the instrument or account, unless otherwise noted.

[†] 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 (in 2008, bank account number payment was called "electronic bank account deduction").

[‡] 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 the given year.

**Adoption means the consumer used the instrument or method in a given year

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Table 9
Cash Holdings, Withdrawals, and Prepaid Card Reloadings
 Dollars per consumer, except as noted

	Mean			Median		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Cash holdings	424	275	340	72	75	70
On person.....	111	69	66	28	30	30
On property.....	325	213	286	15	19	15
Excluding large-value holdings*.....	132	147	138	60	70	60
On person.....	48	51	47	24	29	26
On property.....	91	89	76	10	15	9
Cash withdrawals per month †‡	na	488	502	na	217	239
Amount per withdrawal.....	na	131	124	na	60	60
Withdrawals (number per month).....	na	5.2	6.0	na	4	4
Most frequent location per month †	573	383	397	186	196	186
Amount per withdrawal.....	128	135	133	51	58	58
Withdrawals (number per month).....	5.2	3.6	3.9	2.8	2.0	2.0
All other locations per month †	na	108	108	na	0.0	0.0
Amount per withdrawal.....	na	59	57	na	0	9
Withdrawals (number per month).....	na	1.6	2.1	na	0.1	0.3
Prepaid card reloadings per month †	na	198	136	na	45.7	89.3
Amount per reloading, reloaders only.....	na	146	79	na	47	49
Reloads, reloaders only (number per month).....	3.5	1.7	2.0	1.2	0.8	0.9
Reloaded in the past 12 months (percentage of consumers).....	5.8	7.2	6.2	na	na	na
Reloaded in the past 12 months (percentage of adopters**).....	na	46.5	44.1	na	na	na

* Estimates are for the subsample of respondents with cash holdings of less than or equal to the 95th percentile (Approximately \$1,100 for total, \$280 for on person, and \$1,000 on property in 2008; \$960 for total, \$250 for on person, and \$800 on property in 2009; and \$1,200 for total, \$260 for on person, and \$1,000 on property in 2010.)

† Amount per month is obtained from the amount per withdrawal times the number of withdrawals, calculated for each consumer. For further information please see Section 5.2, "Cash Values" in the technical appendix.

‡ In 2009 and 2010, this number is the withdrawal-weighted average of typical amounts per withdrawal from the primary and all other locations.

** Consumers who have adopted a reloadable prepaid card.

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Table 10
Cash Holdings, by Adoption of Bank Accounts and Payment Instruments*†‡
 Dollars per consumer

Adopters	Mean			Median		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Bank account	435	277	334	75	75	75
On person.....	108	66	66	29	30	30
On property.....	337	218	279	17	19	19
ATM or debit card	435	261	267	60	70	70
On person.....	103	62	60	25	29	29
On property.....	342	206	215	14	19	15
Credit card	278	302	393	85	100	100
On person.....	90	72	72	30	39	39
On property.....	194	237	335	19	20	20
Prepaid card	219	303	297	80	75	75
On person.....	64	66	59	29	30	30
On property.....	162	245	245	39	23	19
Money order**	260	212	354	60	70	45
On person.....	136	77	65	25	28	20
On property.....	129	140	308	18	17	5
Nonadopters	Mean			Median		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Bank account	271	261	422	11	70	19
On person.....	149	101	71	11	36	18
On property.....	137	160	382	0	15	0
ATM or debit card	367	340	713	112	124	70
On person.....	152	99	96	51	49	38
On property.....	229	245	656	27	33	19
Credit card	926	211	214	26	49	32
On person.....	181	61	53	15	20	19
On property.....	781	154	168	0	6	0
Prepaid card	467	262	367	67	75	70
On person.....	121	70	71	25	30	29
On property.....	359	198	312	9	18	13
Money order**	463	299	338	74	80	76
On person.....	105	66	66	28	34	30
On property.....	371	240	282	14	19	19

*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 respondents home, car, office, etc.) instead of on person.

‡ Adoption means the consumer had the instrument or account, unless otherwise noted.

**Adoption means the consumer used the instrument in a given year.

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Table 11
Monthly Cash Withdrawals, by Most Frequent Location*
 Dollars per consumer per location, except as noted

	Mean			Median		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
ATM†	na	339	291	na	182	172
Amount per withdrawal.....	na	97	93	na	53	52
Withdrawals (number per month).....	na	3.9	4.0	na	3.0	2.7
Bank†	na	411	507	na	211	259
Amount per withdrawal.....	na	196	202	na	96	96
Withdrawals (number per month).....	na	2.4	2.9	na	1.6	1.7
Check†	na	948	980	na	952	820
Amount per withdrawal.....	na	365	244	na	262	263
Withdrawals (number per month).....	na	2.9	4.6	na	1.8	3.3
Retail†	na	144	146	na	78	83
Amount per withdrawal.....	na	44	32	na	20	19
Withdrawals (number per month).....	na	4.0	4.6	na	2.0	2.9
Employer†	na	1137	1406	na	791	1493
Amount per withdrawal.....	na	275	403	na	131	389
Withdrawals (number per month).....	na	7.7	4.0	na	4.2	4.1
Family or friend†	na	164	216	na	86	46
Amount per withdrawal.....	na	63	65	na	23	19
Withdrawals (number per month).....	na	2.7	3.8	na	2.0	1.0
Other†	na	532	721	na	96	516
Amount per withdrawal.....	na	335	205	na	93	90
Withdrawals (number per month).....	na	2.1	8.3	na	0.7	3.1
Most frequent location	2008^r	2009^r	2010	2008^r	2009^r	2010
ATM.....	52.9	49.6	50.5	na	na	na
Bank teller.....	24.6	24.6	23.5	na	na	na
Check cashing store.....	1.3	2.5	0.7	na	na	na
Retail or grocery store.....	8.5	9.9	10.3	na	na	na
Employer.....	5.2	4.5	4.6	na	na	na
Family or friend.....	2.5	6.2	6.9	na	na	na
Other.....	0.3	2.7	3.4	na	na	na

* The amount for each location is the dollar amount of withdrawals at the specified location, only by consumers who named that location as their most frequent location.

† Monthly amount is obtained from the amount per withdrawal times the number of withdrawals, calculated for each consumer. For further information please see Section 5.2, "Cash Values" in the technical appendix.

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Table 12
Monthly Cash Withdrawals, by Adoption of Bank Accounts and Payment Instruments*†
 Dollars per month, except as noted

Adopters	Mean			Median		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Bank account	549	462	490	188	217	239
Amount per withdrawal.....	<i>120</i>	122	118	<i>51</i>	60	60
Withdrawals (number per month).....	<i>5.2</i>	5.1	5.9	<i>2.9</i>	3.8	3.9
ATM or debit card	535	464	474	184	216	230
Amount per withdrawal.....	<i>102</i>	116	112	<i>47</i>	58	56
Withdrawals (number per month).....	<i>5.3</i>	5.4	6.0	<i>3.5</i>	3.9	3.9
Credit card	411	424	461	191	208	226
Amount per withdrawal.....	<i>115</i>	122	119	<i>54</i>	60	60
Withdrawals (number per month).....	<i>5.1</i>	4.9	5.2	<i>2.7</i>	3.0	3.1
Prepaid card	344	460	514	191	214	290
Amount per withdrawal.....	<i>113</i>	124	123	<i>53</i>	60	60
Withdrawals (number per month).....	<i>4.0</i>	5.0	6.4	<i>2.6</i>	3.9	3.9
Money order‡	666	642	624	217	333	344
Amount per withdrawal.....	<i>154</i>	174	138	<i>48</i>	78	59
Withdrawals (number per month).....	<i>6.9</i>	5.8	7.4	<i>3.6</i>	3.8	4.3
Nonadopters	Mean			Median		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Bank account	906	778	654	0	678	177
Amount per withdrawal.....	<i>243</i>	245	207	<i>24</i>	84	44
Withdrawals (number per month).....	<i>4.1</i>	5.5	6.3	<i>0.0</i>	3.2	2.7
ATM or debit card	778	598	647	195	249	272
Amount per withdrawal.....	<i>271</i>	203	187	<i>88</i>	100	100
Withdrawals (number per month).....	<i>4.5</i>	4.3	5.5	<i>1.8</i>	2.3	2.7
Credit card	1135	641	600	167	261	257
Amount per withdrawal.....	<i>174</i>	152	136	<i>35</i>	60	50
Withdrawals (number per month).....	<i>5.4</i>	5.8	7.7	<i>3.2</i>	4.0	4.3
Prepaid card	621	501	492	185	217	200
Amount per withdrawal.....	<i>131</i>	134	124	<i>50</i>	60	59
Withdrawals (number per month).....	<i>5.4</i>	5.3	5.7	<i>2.9</i>	3.3	3.3
Money order‡	554	430	444	184	198	200
Amount per withdrawal.....	<i>121</i>	115	118	<i>51</i>	60	60
Withdrawals (number per month).....	<i>4.8</i>	4.9	5.5	<i>2.6</i>	3.0	3.0

*Monthly amount is obtained from the amount per withdrawal times the number of withdrawals, calculated for each consumer. For further information please see Section 5.2, "Cash Values" in the technical appendix.

† Adoption means the consumer had the instrument or account, unless otherwise noted.

‡ Adoption means the consumer used the instrument in a given year.

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Table 13
Share of Consumers Accessing Bank Account and Other Payment Practices

Percentage of consumers	Monthly			Annual		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Bank account access	na	na	na	na	89.7	90.7
Bank branch visit*.....	na	na	na	na	75.2	75.7
ATM.....	na	na	na	na	67.2	72.7
Telephone banking.....	na	na	na	na	31.8	29.4
Online banking.....	na	na	na	na	59.9	63.4
Mobile banking.....	na	na	na	na	8.7	10.3
Other payment practices						
Cash withdrawals.....	91.1	90.1	92.5	95.8	97.7	99.0
Online payment service provider.....	na	na	na	na	20.0	19.5
Online payment service provider, adopters only.....	na	na	na	na	67.6	65.9
Prepaid card reloading†.....	4.3	4.5	3.9	5.8	7.2	6.2
Prepaid card reloading, reloaders only†.....	73.3	63.7	63.8	98.0	92.5	99.1
Mobile payments.....	na	na	na	na	3.4	4.0
Text/SMS.....	na	na	na	na	na	na
Contactless.....	na	na	na	na	1.5	1.0
Other.....	na	na	na	na	na	na
Percentage of adopters	Monthly			Annual		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Bank account access	na	na	na	na	97.7	97.8
Bank branch visit*.....	na	na	na	na	81.8	81.7
ATM.....	na	na	na	na	81.4	79.0
Telephone banking.....	na	na	na	na	77.5	78.1
Online banking.....	na	na	na	na	93.6	93.2
Mobile banking.....	na	na	na	na	85.8	89.1
Other payment practices						
Cash withdrawals.....	93.1	90.2	92.5	97.9	97.8	99.0
Online payment service provider.....	na	na	na	na	67.6	65.9
Prepaid card reloading, reloaders only†.....	73.3	63.7	63.8	98.0	92.5	99.1
Mobile payments.....	na	na	na	na	na	na
Text/SMS.....	na	na	na	na	2.3	3.1
Contactless.....	na	na	na	na	1.5	1.0
Other.....	na	na	na	na	na	na

* Bank branch visit is defined as visiting a bank and interacting with a teller or other bank employee. It does not include visiting an ATM located at a bank branch.

† A reloader has adopted a reloadable prepaid card and, in the past 12 months, has added money to it.

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Table 14
Share of Consumers or Adopters Using Payment Instruments

Percentage of consumers	Monthly			Annual		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	95.1	94.7	95.6	96.0	96.2	96.6
Cash.....	85.7	88.6	90.2	88.0	92.1	93.1
Check.....	81.6	69.2	71.7	86.8	75.0	78.2
Money order.....	8.7	10.9	10.8	19.2	15.6	14.9
Traveler's check.....	0.7	0.1	0.0	4.3	5.9	4.9
Payment cards	89.1	87.1	87.8	90.3	88.2	88.7
Debit.....	64.9	63.0	65.2	67.2	65.3	67.7
Credit.....	69.0	54.7	56.9	72.8	59.7	61.7
Prepaid.....	6.1	9.1	8.7	8.8	13.5	11.9
Electronic payments	73.5	62.3	69.1	75.9	66.8	72.4
Online banking bill payment.....	31.9	33.5	36.7	34.0	35.6	38.6
Bank account number payment.....	70.8	49.0	58.3	73.4	55.8	64.8
Other means of payment						
Direct deduction from income.....	20.3	15.9	16.4	20.9	16.8	17.5

Percentage of adopters ^{†‡}	Monthly			Annual		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	97.5	95.3	96.0	98.0	96.7	96.6
Cash**.....	88.2	88.7	90.3	90.5	92.2	93.2
Check.....	85.1	82.7	82.5	89.7	89.7	90.0
Money order* ^{††}	44.8	40.3	46.8	100.0	57.9	64.5
Traveler's check* ^{††}	15.2	1.2	0.8	100.0	88.1	78.2
Payment cards	95.9	93.3	93.3	97.2	94.5	94.3
Debit.....	82.2	84.3	83.3	85.0	87.3	86.5
Credit.....	89.6	77.9	81.1	94.2	85.0	87.9
Prepaid.....	36.8	28.7	23.4	52.7	42.7	32.1
Electronic payments	92.4	88.2	91.8	95.5	94.6	96.3
Online banking bill payment.....	65.3	71.4	76.1	69.5	75.7	80.1
Bank account number payment* ^{††}	96.4	87.8	90.1	100.0	100.0	100.0
Other means of payment						
Direct deduction from income* ^{††}	96.8	94.8	94.0	100.0	100.0	100.0

* Estimates are 100 percent whenever adoption is defined solely as annual incidence of use.

† Each payment instrument uses adopters of that particular payment instrument as the denominator. For example, in 2010, 90.3 percent of cash adopters used cash in a typical month.

‡ Adoption means the consumer had the instrument, unless otherwise noted.

**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 the given year.

†† Adoption means the consumer used the instrument or method in a given year.

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Table 15
Share of Consumers Making a Transaction, by Type of Transaction

	Monthly			Annual		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any Transaction	96.6	99.1	99.3	96.6	100.0	99.9
Online or electronic	86.9	85.9	85.9	88.4	88.6	89.1
By mail, in person, or by phone	96.3	97.6	98.0	96.5	97.6	98.0
Bill payments	95.5	95.7	96.0	95.6	96.9	97.5
Automatic.....	58.1	52.6	55.5	58.5	53.3	56.7
Direct deduction from income.....	20.3	15.9	16.4	20.9	16.8	17.5
Other automatic.....	58.1	51.0	54.0	58.5	51.7	55.3
Online.....	65.2	61.3	63.0	69.6	66.1	67.7
By mail, in person, or by phone.....	81.7	79.8	83.1	88.0	86.9	89.1
Nonbill payments	96.2	97.2	97.1	96.5	97.8	97.3
Retail goods and services	na	96.9	95.9	na	97.5	96.1
Online or electronic.....	60.4	58.8	52.3	79.3	73.2	68.9
By mail, in person, or by phone.....	na	96.2	96.2	na	96.8	96.4
Retail goods.....	95.6	95.7	93.6	95.8	96.5	94.2
Services.....	86.2	81.8	90.4	89.1	89.2	93.0
Person to person	na	44.6	56.9	na	55.2	70.9
Online or electronic.....	na	13.8	15.3	na	19.4	21.7
By mail, in person, or by phone.....	na	40.2	51.4	na	51.3	66.7

* Adjusted for changes from 2008 to 2009 in the survey definition of transaction categories to make the two years directly comparable.

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Table 16
Share of Consumers Using Payment Instrument, by Type of Transaction

Monthly	Bill Payments			Nonbill Payments					
				Online			Retail, services, and person to person*		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	76.7	76.0	79.0	31.5	29.2	15.3	90.5	90.2	91.8
Cash.....	21.5	30.1	34.3	na	na	na	86.2	87.6	89.5
Check or money order.....	71.9	63.7	67.8	31.5	29.2	15.3	58.4	51.8	50.9
Check.....	na	57.7	63.1	na	25.7	14.1	na	49.2	49.0
Money order.....	7.7	9.5	9.9	na	5.5	3.4	4.9	4.8	5.8
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	72.2	60.9	66.1	46.3	42.0	40.4	88.3	83.0	82.9
Debit.....	57.9	41.4	43.7	27.2	25.3	24.1	61.4	59.7	60.2
Credit.....	56.7	32.8	37.3	31.6	24.5	22.7	64.8	48.9	51.6
Prepaid.....	2.1	2.9	3.7	2.6	2.9	4.3	5.8	7.7	6.4
Electronic payments	70.5	60.2	66.2	33.0	19.0	22.8	na	na	na
Online banking bill payment.....	31.9	33.4	36.7	na	na	na	na	na	na
Bank account number payment.....	65.1	44.6	51.9	33.0	19.0	22.8	na	na	na
Other means of payment									
Direct deduction from income.....	20.3	15.9	16.4	na	na	na	na	na	na
Annual	Bill Payments			Nonbill Payments					
				Online			Retail, services, and person to person*		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	84.4	85.4	87.3	39.0	37.3	22.8	92.8	93.0	93.6
Cash.....	25.0	37.0	41.7	na	na	na	88.7	91.5	92.4
Check or money order.....	80.5	74.2	76.6	39.0	37.3	22.8	68.1	63.4	62.2
Check.....	na	67.5	72.1	na	33.2	20.9	na	60.5	60.6
Money order.....	14.4	13.1	13.1	na	8.8	5.2	19.2	8.3	7.8
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	75.2	65.3	71.2	65.0	58.2	57.9	89.4	84.6	84.5
Debit.....	60.7	44.0	47.4	36.0	34.8	34.2	63.8	62.1	63.3
Credit.....	62.3	37.8	42.9	48.3	38.3	37.9	70.4	54.8	57.2
Prepaid.....	2.6	5.2	4.8	3.4	6.4	5.3	8.4	11.9	10.2
Electronic payments	73.3	63.2	69.7	41.5	27.6	31.4	na	na	na
Online banking bill payment.....	34.0	35.1	38.2	na	na	na	na	na	na
Bank account number payment.....	67.6	49.1	58.1	41.5	27.6	31.4	na	na	na
Other means of payment									
Direct deduction from income.....	20.9	16.8	17.5	na	na	na	na	na	na

* Adjusted for changes from 2008 to 2009 in the survey definition of transaction categories to make the two years directly comparable.

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Table 17
Share of Consumers Using Payment Instrument, by Type of Bill Payment

Monthly	Automatic			Online			By Mail or In Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any instrument	58.1	52.6	55.5	65.2	61.3	63.0	81.7	79.8	83.1
Excl. online banking bill payment*.....	58.1	49.4	52.8	na	na	na	na	na	na
Paper instruments	na	na	na	na	na	na	76.5	74.4	77.7
Cash.....	na	na	na	na	na	na	21.5	30.1	34.3
Check or money order.....	na	na	na	na	na	na	71.9	63.7	67.8
Check.....	na	na	na	na	na	na	na	57.7	63.1
Money order.....	na	na	na	na	na	na	7.7	9.5	9.9
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	39.4	32.1	37.4	42.6	40.2	41.5	37.3	37.2	42.0
Debit.....	21.6	18.5	23.1	28.3	28.9	27.8	24.7	25.4	28.4
Credit.....	29.7	21.2	22.0	24.4	19.2	21.1	21.2	18.4	22.2
Prepaid.....	na	na	na	na	na	na	2.1	2.9	3.7
Electronic payments	53.5	41.8	45.8	54.7	48.1	51.5	na	na	na
Online banking bill payment.....	na	20.6	21.6	31.9	29.4	30.4	na	na	na
Bank account number payment.....	53.5	30.8	37.5	42.8	31.2	35.6	na	na	na
Other means of payment									
Direct deduction from income.....	20.3	15.9	16.4	na	na	na	na	na	na
Annual	Automatic			Online			By Mail or In Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any instrument	58.5	53.3	56.7	69.6	66.1	67.7	88.0	86.9	89.1
Excl. online banking bill payment*.....	58.5	50.3	54.4	na	na	na	na	na	na
Paper instruments	na	na	na	na	na	na	84.0	83.7	85.9
Cash.....	na	na	na	na	na	na	25.0	37.0	41.7
Check or money order.....	na	na	na	na	na	na	80.5	74.2	76.6
Check.....	na	na	na	na	na	na	na	67.5	72.1
Money order.....	na	na	na	na	na	na	14.4	13.1	13.1
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	41.8	33.6	39.3	47.6	46.2	47.9	42.3	44.0	48.5
Debit.....	23.1	19.3	24.3	32.0	32.5	31.4	26.9	29.7	32.9
Credit.....	32.7	23.2	25.7	29.3	24.0	26.4	26.7	23.6	27.0
Prepaid.....	na	na	na	na	na	na	2.6	5.2	4.8
Electronic payments	54.5	43.4	48.4	59.5	51.7	55.8	na	na	na
Online banking bill payment.....	na	21.9	22.4	34.0	31.1	32.1	na	na	na
Bank account number payment.....	54.5	34.1	41.6	46.5	35.8	42.5	na	na	na
Other means of payment									
Direct deduction from income.....	20.9	16.8	17.5	na	na	na	na	na	na

* Online banking bill pay is excluded to show direct comparison between 2008 and 2009 estimates for automatic bill payments. OBPP was not included as a payment choice for automatic bill payments in the 2008 SCPC.

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Table 18
Share of Consumers Using Payment Instrument, by Type of Retail Goods*
 Percentage of consumers

Monthly	Total			Essential Goods†			Nonessential Goods†		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any instrument	95.6	95.7	93.6	93.5	na	na	79.1	na	na
Paper instruments	87.9	82.1	81.4	79.8	na	na	55.9	na	na
Cash.....	85.0	81.7	80.1	76.5	na	na	51.3	na	na
Check or money order.....	44.7	31.2	31.4	30.2	na	na	21.1	na	na
Check.....	na	30.2	31.0	na	na	na	na	na	na
Money order.....	na	3.3	3.6	na	na	na	na	na	na
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	87.0	80.2	79.1	82.9	na	na	68.9	na	na
Debit.....	60.6	57.4	58.0	58.8	na	na	45.0	na	na
Credit.....	64.0	45.5	47.4	55.0	na	na	46.2	na	na
Prepaid.....	5.4	6.5	5.7	5.1	na	na	2.8	na	na
Electronic payments	na	na	na	na	na	na	na	na	na
Online banking bill payment.....	na	na	na	na	na	na	na	na	na
Bank account number payment.....	na	na	na	na	na	na	na	na	na
Annual	Total			Essential Goods†			Nonessential Goods†		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any instrument	95.8	96.5	94.2	94.5	na	na	91.9	na	na
Paper instruments	89.6	86.0	84.0	87.4	na	na	73.1	na	na
Cash.....	86.7	86.0	83.1	84.1	na	na	67.8	na	na
Check or money order.....	51.9	40.3	38.9	42.6	na	na	39.6	na	na
Check.....	na	38.8	na	na	na	na	na	na	na
Money order.....	na	5.6	5.0	na	na	na	na	na	na
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	88.5	82.5	81.2	85.6	na	na	83.7	na	na
Debit.....	63.2	60.5	61.1	62.0	na	na	56.7	na	na
Credit.....	69.4	51.4	53.3	64.0	na	na	63.8	na	na
Prepaid.....	8.2	11.0	9.0	7.6	na	na	4.8	na	na
Electronic payments	na	na	na	na	na	na	na	na	na
Online banking bill payment.....	na	na	na	na	na	na	na	na	na
Bank account number payment.....	na	na	na	na	na	na	na	na	na

* Adjusted for changes from 2008 to 2009 in the survey definition of transaction categories to make the two years directly comparable.

† For definitions of essential and nonessential goods, see Appendix A.5 in Foster, Meijer, Schuh, and Zabek 2009.

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Table 19
Share of Consumers Using Payment Instrument, by Type of Nonretail, In-Person Transactions*

Monthly	Total			Services and Other			Person to Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any instrument	86.2	85.7	93.0	na	81.8	90.4	na	44.6	56.9
Paper instruments	75.0	75.7	84.6	na	67.5	78.4	na	40.0	51.3
Cash.....	61.9	65.4	78.4	na	56.2	73.4	na	35.1	43.9
Check or money order.....	47.9	43.3	43.5	na	37.3	34.0	na	16.0	21.7
Check.....	na	41.7	41.9	na	37.3	33.9	na	14.9	20.2
Money order.....	na	3.4	4.9	na	2.2	3.0	na	1.9	3.4
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	65.0	63.5	75.4	na	63.1	74.8	na	8.6	8.0
Debit.....	42.1	42.5	51.0	na	42.4	50.9	na	6.4	6.0
Credit.....	41.6	34.6	43.9	na	34.4	43.6	na	4.2	4.0
Prepaid.....	1.9	4.0	4.3	na	4.0	4.3	na	na	na
Electronic payments	na	8.2	10.4	na	na	na	na	8.2	10.4
Online banking bill payment.....	na	4.5	6.0	na	na	na	na	4.5	6.0
Bank account number payment.....	na	5.7	5.9	na	na	na	na	5.7	5.9
Annual	Total			Services and Other			Person to Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Any instrument	89.1	90.6	95.1	na	89.2	93.0	na	55.2	70.9
Paper instruments	80.9	83.8	89.6	na	78.3	83.6	na	51.0	66.5
Cash.....	66.6	76.5	85.5	na	68.6	79.3	na	46.1	60.0
Check or money order.....	58.0	57.7	56.5	na	51.3	43.2	na	27.8	37.5
Check.....	na	55.6	55.2	na	50.8	43.9	na	26.6	36.6
Money order.....	na	6.4	6.8	na	4.7	4.1	na	3.6	4.6
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	73.5	73.1	80.4	na	72.9	79.9	na	12.4	12.5
Debit.....	48.3	50.4	55.8	na	50.4	55.4	na	8.7	8.8
Credit.....	55.9	45.7	51.5	na	45.5	51.2	na	6.8	6.7
Prepaid.....	3.8	6.7	6.9	na	6.7	6.9	na	na	na
Electronic payments	na	12.3	15.2	na	na	na	na	12.3	15.2
Online banking bill payment.....	na	6.3	7.9	na	na	na	na	6.3	7.9
Bank account number payment.....	na	9.1	9.8	na	na	na	na	9.1	9.8

* Adjusted for changes from 2008 to 2009 in the survey definition of transaction categories to make the two years directly comparable.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 20
Number of Consumer Payments in a Typical Month, by Type of Payment Instrument

Number per consumer	Mean			Growth Rate (%)	
	2008 ^r	2009 ^r	2010	08-09 ^r	09-10
Total payments	71.2	67.1	73.0	-5.8	8.8
Paper instruments	25.7	28.9	29.0	12.4	.4
Cash.....	16.1	20.4	21.1	27.3	3.0
Check or money order.....	10.1	8.8	8.3	-12.1	-6.2
Check.....	9.7	8.2	7.7	-15.1	-5.5
Money order.....	0.4	0.7	0.6	–	-10.6
Traveler's check.....	0.0	0.0	0.0	–	-9.6
Payment cards	36.9	31.3	36.4	-15.1	16.2
Debit.....	21.8	19.5	22.7	-10.6	16.3
Credit.....	15.0	11.5	13.3	-23.5	15.3
Prepaid.....	0.6	0.7	0.6	–	- 0.1
Prepaid, per adopter*.....	3.4	2.1	1.6	-38.0	-23.0
Electronic payments	8.0	6.1	6.7	-24.0	10.5
Online banking bill payment.....	3.8	3.3	3.2	-14.4	- .2
Bank account number payment.....	4.3	2.9	3.5	–	22.4
Bank account number payment, per adopter*.....	7.8	5.1	5.4	–	5.5
Other means of payment					
Direct deduction from income.....	1.0	0.5	0.6	-44.6	16.9
Percentage share	Share (%)			Change	
	2008 ^r	2009 ^r	2010	08-09 ^r	09-10
Total payments	100	100	100	–	–
Paper instruments	35.8	43.4	40.0	7.6	-3.4
Cash.....	21.8	30.2	28.6	8.3	-1.6
Check or money order.....	13.9	13.2	11.4	-0.7	-1.8
Check.....	13.4	12.2	10.5	-1.2	-1.6
Money order.....	0.6	1.1	0.9	–	-0.2
Traveler's check.....	0.0	0.0	0.0	–	0.0
Payment cards	51.8	46.9	50.0	-5.0	3.2
Debit.....	30.1	28.9	31.1	-1.2	2.1
Credit.....	20.9	17.0	18.2	-3.9	1.2
Prepaid.....	0.8	1.0	0.8	–	-0.2
Electronic payments	11.2	9.0	9.2	-2.2	0.2
Online banking bill payment [†]	3.2	4.8	4.4	1.6	-0.4
Bank account number payment [†]	8.0	4.2	4.8	–	0.6
Other means of payment					
Direct deduction from income.....	1.2	0.7	0.8	-0.5	0.1

* Per adopter estimate is included due to changes in the survey design that affected the rates of adoption of payment instruments (see Table 4), making the per consumer estimates not comparable across years. Estimates are calculated using only adopters of a payment instrument, not all consumers.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values.

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Table 21
Number of Consumer Payments in a Typical Month, by Type of Payment Transaction

Number per consumer	Mean			Growth Rate (%)	
	2008 ^r	2009 ^r	2010	08-09 ^r	09-10
Total	71.2	67.1	73.0	-5.8	8.8
Online or electronic	20.3	15.7	16.6	-22.5	5.8
By mail, in person, or by phone	50.9	51.1	55.9	0.2	9.5
Bill payments	20.3	18.2	21.2	-10.4	16.1
Automatic.....	6.6	4.8	6.1	-26.9	25.9
Direct deduction from income.....	1.0	0.5	0.6	-44.6	16.9
Other automatic.....	5.7	4.3	5.5	-23.9	27.0
Online.....	6.8	5.3	5.9	-22.5	11.5
By mail, in person, or by phone.....	7.1	8.2	9.2	15.2	13.3
Nonbill payments	50.9	48.5	51.4	-	5.8
Retail and services	na	45.0	46.8	-	4.1
Online or electronic.....	6.9	4.8	3.7	-29.6	-23.3
By mail, in person, or by phone.....	na	40.2	43.1	-	7.3
Retail goods.....	30.6	27.3	25.1	-10.7	-8.2
Services.....	13.5	12.9	18.1	-	40.2
Person to person	na	3.5	4.5	-	27.8
Online or electronic.....	na	0.9	1.0	-	19.9
By mail, in person, or by phone.....	na	2.7	3.5	-	30.0
Percentage share	Share (%)			Change	
	2008 ^r	2009 ^r	2010	08-09 ^r	09-10
Total	100	100	100	-	-
Online or electronic	28.3	23.5	22.9	-4.8	-0.6
By mail or in person	71.7	76.4	77.1	4.8	0.6
Bill payments	28.6	27.3	29.2	-1.3	1.9
Automatic.....	9.1	7.2	8.4	-1.9	1.2
Direct deduction from income.....	1.2	0.7	0.8	-0.5	0.1
Other automatic.....	7.9	7.2	8.4	-0.7	1.2
Online.....	9.6	7.9	8.1	-1.7	0.2
By mail, in person, or by phone.....	9.9	12.2	12.7	2.3	0.5
Nonbill Payments	71.4	72.7	70.8	-	-1.9
Retail and services	na	67.4	64.6	-	-2.8
Online or electronic.....	9.6	7.2	5.1	-2.4	-2.1
By mail, in person, or by phone.....	na	60.2	59.5	-	-0.7
Retail goods.....	42.9	40.9	34.6	-2.0	-6.3
Services.....	18.9	19.3	24.9	-	5.6
Person to person	na	5.3	6.2	-	0.9
Online or electronic.....	na	1.2	1.4	-	0.1
By mail, in person, or by phone.....	na	4.1	4.9	-	0.8

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Table 22
Use of Payment Instruments in a Typical Month, by Type of Transaction

Number per consumer	Bill Payments			Nonbill payments					
				Online			Retail, Service and Person to Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	5.0	5.6	5.9	1.7	1.4	0.7	19.5	22.0	22.6
Cash.....	1.2	2.3	2.5	na	na	na	<i>15.2</i>	18.4	18.8
Check or money order.....	4.0	3.4	3.5	1.7	1.4	0.7	<i>4.7</i>	4.0	4.2
Check.....	3.8	3.1	3.3	na	1.3	0.6	na	3.9	4.0
Money order.....	0.2	0.3	0.3	na	0.2	0.1	<i>0.2</i>	0.2	0.3
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	7.9	7.2	9.5	4.1	2.8	2.2	25.0	21.4	24.9
Debit.....	4.9	4.7	6.3	2.3	1.7	1.3	<i>15.1</i>	13.4	15.5
Credit.....	3.2	2.6	3.2	1.8	1.1	0.8	<i>10.3</i>	8.0	9.4
Prepaid.....	0.1	0.1	0.1	0.1	0.1	0.1	<i>0.4</i>	0.5	0.4
Electronic payments	6.7	5.1	5.4	1.3	0.6	1.0	na	0.4	0.4
Online banking bill payment.....	2.4	3.1	3.0	na	na	na	na	0.2	0.2
Bank account number payment.....	4.5	2.1	2.4	1.3	0.6	1.0	na	0.2	0.2
Other methods of payment									
Direct deduction from income.....	1.0	0.5	0.6	na	na	na	na	na	na

Percentage share	Bill Payments			Nonbill Payments					
				Online			Retail, Service and Person to Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	6.9	8.3	8.0	2.2	2.1	0.9	26.6	33.0	31.1
Cash.....	1.5	3.2	3.2	na	na	na	20.3	27.0	25.4
Check or money order.....	5.4	5.1	4.8	2.2	2.1	0.9	6.3	6.0	5.7
Check.....	5.1	4.6	4.4	na	1.9	0.7	<i>na</i>	5.7	5.4
Money order.....	0.3	0.5	0.4	na	0.2	0.1	<i>0.3</i>	0.3	0.3
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	11.0	10.7	13.0	5.7	4.2	3.0	35.1	31.9	34.1
Debit.....	6.6	6.8	8.5	3.1	2.5	1.7	20.5	19.6	20.9
Credit.....	4.4	3.7	4.3	2.5	1.6	1.1	14.0	11.6	12.7
Prepaid.....	0.1	0.2	0.1	0.1	0.1	0.2	<i>0.6</i>	0.7	0.5
Electronic payments	9.5	7.6	7.4	1.7	0.9	1.3	na	0.6	0.5
Online banking bill payment.....	3.2	4.5	4.1	na	na	na	na	0.3	0.3
Bank account number payment.....	6.3	3.1	3.3	1.7	0.9	1.3	na	0.3	0.2
Other methods of payment									
Direct deduction from income.....	1.2	0.7	0.8	na	na	na	na	na	na

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Table 23
Use of Payment Instruments in a Typical Month, by Type of Bill Payment

Mean number per consumer	Automatic			Online			By Mail, in Person, or by Phone		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	na	na	na	na	na	na	5.0	5.5	5.8
Cash.....	na	na	na	na	na	na	1.2	2.3	2.5
Check or money order.....	na	na	na	na	na	na	4.0	3.4	3.5
Check.....	na	na	na	na	na	na	na	3.1	3.3
Money order.....	na	na	na	na	na	na	0.2	0.3	0.3
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	3.2	2.3	3.3	2.8	2.4	2.9	2.2	2.7	3.5
Debit.....	2.0	1.3	2.1	1.8	1.8	2.0	1.3	1.7	2.3
Credit.....	1.3	1.0	1.2	1.1	0.7	0.9	1.0	1.0	1.2
Prepaid.....	na	na	na	na	na	na	0.1	0.1	0.1
Electronic payments	2.6	2.2	2.3	4.2	3.0	3.1	na	na	na
Online banking bill payment*.....	1.4	1.2	1.2	2.4	1.9	1.9	na	na	na
Bank account number payment.....	1.2	1.0	1.2	2.0	1.1	1.3	na	na	na
Other means of payment									
Direct deduction from income.....	1.0	0.5	0.6	na	na	na	na	na	na

Percentage share	Automatic			Online			By Mail, in Person, or by Phone		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	na	na	na	na	na	na	6.9	8.3	8.0
Cash.....	na	na	na	na	na	na	1.5	3.2	3.2
Check or money order.....	na	na	na	na	na	na	5.4	5.1	4.8
Check.....	na	na	na	na	na	na	na	4.6	4.4
Money order.....	na	na	na	na	na	na	0.3	0.5	0.4
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	4.3	3.3	4.4	3.7	3.5	3.8	3.0	4.0	4.7
Debit.....	2.5	1.9	2.8	2.3	2.6	2.7	1.7	2.4	3.0
Credit.....	1.7	1.4	1.6	1.4	0.9	1.1	1.3	1.4	1.6
Prepaid.....	na	na	na	na	na	na	0.1	0.2	0.1
Electronic payments	3.6	3.2	3.1	5.9	4.4	4.3	na	na	na
Online banking bill payment*.....	1.9	1.7	1.6	3.2	2.8	2.5	na	na	na
Bank account number payment.....	1.7	1.5	1.6	6.4	1.6	1.7	na	na	na
Other means of payment									
Direct deduction from income.....	1.2	0.7	0.8	na	na	na	na	na	na

*The 2008 automatic bill payment number for online banking bill payment is derived from the ratio of total electronic automatic bill payments to total number of online banking bill payments in the 2009 SCPC.

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Table 24
Use of Payment Instruments in a Typical Month, by Type of Retail Goods

Mean number per consumer	Total*			Essential Goods†			Nonessential Goods†		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	12.3	12.6	10.7	8.4	na	na	4.1	na	na
Cash.....	10.8	11.3	9.4	7.5	na	na	3.4	na	na
Check or money order.....	1.7	1.9	1.7	1.1	na	na	0.7	na	na
Check.....	na	1.8	1.6	na	na	na	na	na	na
Money order.....	na	0.1	0.1	na	na	na	na	na	na
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	18.6	14.8	14.5	12.3	na	na	6.3	na	na
Debit.....	11.6	9.2	9.2	7.8	na	na	3.9	na	na
Credit.....	7.3	5.6	5.4	4.7	na	na	2.6	na	na
Prepaid.....	0.3	0.3	0.2	0.2	na	na	0.1	na	na
Electronic payments	na	na	na	na	na	na	na	na	na
Online banking bill payment.....	na	na	na	na	na	na	na	na	na
Bank account number payment.....	na	na	na	na	na	na	na	na	na
Percentage share	Total*			Essential Goods†			Nonessential Goods†		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	16.8	18.9	14.6	11.3	na	na	5.5	na	na
Cash.....	14.5	16.2	12.4	9.9	na	na	4.6	na	na
Check or money order.....	2.3	2.7	2.2	1.4	na	na	0.9	na	na
Check.....	na	2.6	2.1	na	na	na	na	na	na
Money order.....	na	0.1	0.1	na	na	na	na	na	na
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	26.1	22.0	19.9	17.2	na	na	8.8	na	na
Debit.....	15.7	13.4	12.3	10.5	na	na	5.2	na	na
Credit.....	9.9	8.1	7.3	6.4	na	na	3.5	na	na
Prepaid.....	0.5	0.4	0.3	0.3	na	na	0.1	na	na
Electronic payments	na	na	na	na	na	na	na	na	na
Online banking bill payment.....	na	na	na	na	na	na	na	na	na
Bank account number payment.....	na	na	na	na	na	na	na	na	na

* Adjusted for changes from 2008 to 2009 in the survey definition of transaction categories to make the two years directly comparable.

† For definitions of essential and nonessential goods, see Appendix A.5 in Foster, Meijer, Schuh, and Zabek 2009.

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Table 25
Use of Payment Instruments in a Typical Month, by Type of Nonretail, In-Person Transactions

Mean number per consumer	Total*			Services and Other			Person to Person		
	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010	2008 ^r	2009 ^r	2010
Paper instruments	7.3	9.4	12.0	na	6.7	8.5	na	2.7	3.5
Cash.....	4.4	7.5	9.7	na	5.4	7.1	na	2.2	2.7
Check or money order.....	3.0	2.2	2.5	na	1.6	1.6	na	0.6	0.9
Check.....	na	2.1	2.5	na	1.6	1.6	na	0.5	0.9
Money order.....	na	0.1	0.2	na	0.1	0.1	na	0.1	0.1
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	6.5	6.7	10.4	na	6.3	9.7	na	0.5	0.7
Debit.....	3.6	4.3	6.4	na	4.0	6.0	na	0.4	0.5
Credit.....	3.0	2.4	4.0	na	2.3	3.8	na	0.1	0.2
Prepaid.....	0.1	0.2	0.1	na	0.2	0.1	na	na	na
Electronic payments	na	0.4	0.4	na	na	na	na	0.4	0.4
Online banking bill payment.....	na	0.2	0.2	na	na	na	na	0.2	0.2
Bank account number payment.....	na	0.2	0.2	na	na	na	na	0.2	0.2
Percentage share	Total*			Services and Other			Person to Person		
	2008 ^r	2009 ^r	2010	2008	2009 ^r	2010	2008	2009 ^r	2010
Paper instruments	9.8	14.1	16.4	na	10.0	11.6	na	4.1	4.9
Cash.....	5.8	10.8	13.0	na	7.6	9.4	na	3.2	3.6
Check or money order.....	4.0	3.3	3.5	na	2.4	2.2	na	0.9	1.3
Check.....	na	3.1	3.3	na	2.3	2.1	na	0.8	1.1
Money order.....	na	0.2	0.2	na	0.1	0.1	na	0.1	0.1
Traveler's check.....	na	na	na	na	na	na	na	na	na
Payment cards	9.1	9.9	14.2	na	9.3	13.3	na	0.7	0.9
Debit.....	4.8	6.2	8.6	na	5.7	8.0	na	0.5	0.6
Credit.....	4.1	3.5	5.4	na	3.3	5.1	na	0.2	0.3
Prepaid.....	0.1	0.2	0.2	na	0.2	0.2	na	na	na
Electronic payments	na	0.6	0.5	na	na	na	na	0.6	0.5
Online banking bill payment.....	na	0.3	0.3	na	na	na	na	0.3	0.3
Bank account number payment.....	na	0.3	0.2	na	na	na	na	0.3	0.2

* Adjusted for changes from 2008 to 2009 in the survey definition of transaction categories to make the two years directly comparable.

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 26
Payment Instruments Used in a Typical Period, by Type of Instrument and Transaction
 Mean number per consumer

	Typical month	2008 ^r	2009 ^r	2010
All payments (9 instruments available)*		4.1	3.7	3.9
Paper instruments.....		1.8	1.7	1.7
Payment cards.....		1.4	1.3	1.3
Electronic payments.....		1.0	0.8	0.9
Bill payments (8 instruments available)†		3.0	2.6	2.9
Paper instruments.....		1.0	0.9	1.0
Payment cards.....		1.1	0.8	0.8
Electronic payments.....		0.9	0.8	0.9
Online payments (6 instruments available)‡		1.2	1.0	0.9
Paper instruments.....		0.3	0.3	0.2
Payment cards.....		0.6	0.5	0.5
Electronic payments.....		0.3	0.2	0.2
In-person payments (8 instruments available)**		2.8	2.6	2.7
Paper instruments.....		1.5	1.4	1.4
Payment cards.....		1.3	1.1	1.2
Electronic payments.....		na	0.1	0.1
	Typical year	2008 ^r	2009 ^r	2010
All payments (9 instruments available)*		4.5	4.1	4.3
Paper instruments.....		2.0	1.9	1.9
Payment cards.....		1.5	1.4	1.4
Electronic payments.....		1.1	0.9	1.0
Bill payments (8 instruments available)†		3.3	2.9	3.3
Paper instruments.....		1.2	1.1	1.2
Payment cards.....		1.2	0.8	0.9
Electronic payments.....		1.0	0.8	1.0
Online payments (6 instruments available)‡		1.6	1.4	1.3
Paper instruments.....		0.4	0.4	0.3
Payment cards.....		0.9	0.8	0.8
Electronic payments.....		0.4	0.3	0.3
In-person payments (8 instruments available)**		3.1	3.0	3.0
Paper instruments.....		1.7	1.6	1.6
Payment cards.....		1.4	1.3	1.3
Electronic payments.....		na	0.2	0.2

* The 9 available payment instruments include cash, check, traveler's check, money order, debit card, credit card, prepaid card, OBBP, and BANP.

† Traveler's check is not accepted as a payment instrument for bill payments.

‡ Cash, traveler's check, and OBBP are not accepted as payment instruments for online payments.

** OBBP is not accepted as a payment instrument for in-person payments

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 27
Loss, Theft, or Fraudulent Use of Payment Instrument

Percentage of consumers	2008 ^r	2009 ^r	2010
Lost or stolen in past 12 months	na	na	13.2
Cash.....	na	na	7.3
Checks.....	na	na	1.5
Credit card.....	na	na	3.6
Debit card.....	na	na	4.7
Percentage of adopters	2008 ^r	2009 ^r	2010
Lost or stolen in past 12 months	na	na	13.3
Cash.....	na	na	7.3
Checks.....	na	na	1.6
Credit card.....	na	na	5.2
Debit card.....	na	na	6.1
Mean dollar value* (adopters)	2008 ^r	2009 ^r	2010
Amount lost or stolen in past 12 months			
Cash.....	na	na	391
Amount of fraudulent charges in past 12 months†			
Checks.....	na	na	40
Credit card.....	na	na	600
Debit card.....	na	na	370

* Amount reported is the total amount of loss or fraud over the past 12 months among consumers who experienced loss, theft, or fraud.

† 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: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available. Dollar values are not adjusted for inflation.

Table 28
Importance Rankings of Characteristics of Payment Instruments
 Percentage of consumers

2008 ^r	Most Important	2nd Most	3rd Most	4th Most	5th Most	Least Important
Characteristics						
Acceptance for payment.....	9.9	na	na	na	na	5.6
Acquisition and setup.....	0.4	na	na	na	na	41.4
Control over payment timing.....	10.5	na	na	na	na	19.8
Cost.....	10.1	na	na	na	na	5.1
Ease of use.....	27.5	na	na	na	na	4.8
Payment records.....	5.7	na	na	na	na	4.3
Payment speed.....	3.9	na	na	na	na	17.9
Security.....	31.9	na	na	na	na	1.0
2009 ^r	Most Important	2nd Most	3rd Most	4th Most	5th Most	Least Important
Characteristics						
Acceptance for payment.....	22.8	24.0	25.1	na	na	27.6
Convenience.....	27.8	25.7	25.2	na	na	20.6
Cost.....	26.2	27.1	21.8	na	na	24.4
Security.....	55.1	24.7	13.8	na	na	5.7
2010	Most Important	2nd Most	3rd Most	4th Most	5th Most	Least Important
Characteristics						
Acceptance for payment.....	21.5	19.2	19.9	15.9	12.7	10.0
Acquisition and setup.....	9.2	9.7	10.3	15.0	19.7	35.4
Convenience.....	27.1	21.0	18.6	16.3	10.9	5.3
Cost.....	23.7	22.5	14.9	16.9	12.3	8.9
Payment records.....	15.0	16.4	17.9	19.8	16.8	13.3
Security.....	47.3	23.2	13.3	8.9	5.1	1.4

NOTES: Superscript "r" denotes that numbers in the section may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available. Each survey asked about a different set of characteristics, as indicated in this table.

Table 29A
Assessments of Payment Instruments: Acceptance for Payment
 Percentage of consumers

	Rarely Accepted	Occasionally Accepted	Often Accepted	Usually Accepted	Almost Always Accepted
Cash					
2008 ^r	1.9	3.1	8.3	11.0	75.7
2009 ^r	2.9	1.8	8.2	11.4	75.8
2010.....	2.4	1.6	7.4	13.1	75.4
Check					
2008 ^r	1.7	12.7	31.6	37.1	16.9
2009 ^r	5.0	15.3	27.4	33.8	18.5
2010.....	2.9	14.3	32.3	33.9	16.6
Debit card					
2008 ^r	1.7	2.5	12.9	38.2	44.7
2009 ^r	2.9	0.9	12.7	31.7	51.8
2010.....	1.2	1.4	10.2	36.2	50.9
Credit card					
2008 ^r	1.7	0.1	7.9	32.5	57.7
2009 ^r	3.0	0.9	7.4	29.6	59.2
2010.....	1.5	1.4	6.3	32.2	58.5
Prepaid card					
2008 ^r	3.9	9.7	23.5	30.5	32.4
2009 ^r	4.9	6.7	24.0	31.8	32.6
2010.....	3.8	8.5	25.4	31.2	31.1
Bank account number payment*					
2008 ^r	<i>13.5</i>	<i>19.5</i>	<i>25.9</i>	<i>21.4</i>	<i>19.7</i>
2009 ^r	30.2	22.0	22.2	13.7	11.9
2010.....	28.8	22.8	24.9	14.2	9.2
Online banking bill payment*					
2008 ^r	<i>13.5</i>	<i>19.5</i>	<i>25.9</i>	<i>21.4</i>	<i>19.7</i>
2009 ^r	10.3	9.4	26.6	26.1	27.6
2010.....	9.5	10.2	26.6	27.3	26.3

* In 2008 respondents were asked to assess "electronic deduction." In the 2009 and 2010 SCPC, we disaggregated the rating of electronic deduction into "bank account number payment" and "online banking bill payment".

NOTES: Superscript "r" denotes that numbers in the row may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values.

Table 29B
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					
2008 ^r	2.4	5.3	13.5	18.0	60.7
2009.....	na	na	na	na	na
2010.....	2.0	5.5	13.3	20.6	58.7
Check					
2008 ^r	2.8	9.0	21.5	47.6	19.2
2009.....	na	na	na	na	na
2010.....	2.1	7.8	25.4	38.3	26.3
Debit card					
2008 ^r	1.6	4.6	22.6	46.9	24.3
2009.....	na	na	na	na	na
2010.....	1.8	4.1	19.7	41.3	33.1
Credit card					
2008 ^r	4.5	8.1	22.1	43.0	22.3
2009.....	na	na	na	na	na
2010.....	5.0	10.4	20.3	36.8	27.5
Prepaid card					
2008 ^r	5.0	13.8	33.3	31.5	16.4
2009.....	na	na	na	na	na
2010.....	5.4	13.7	35.7	26.3	18.8
Bank account number payment*					
2008 ^r	4.8	17.8	27.7	36.2	13.6
2009.....	na	na	na	na	na
2010.....	4.9	14.8	31.8	28.6	20.0
Online banking bill payment*					
2008 ^r	4.8	17.8	27.7	36.2	13.6
2009.....	na	na	na	na	na
2010.....	6.0	13.5	29.6	28.2	22.6

* In 2008 respondents were asked to assess "electronic deduction." In the 2009 and 2010 SCPC, we disaggregated the rating of electronic deduction into "bank account number payment" and "online banking bill payment".

NOTES: Superscript "r" denotes that numbers in the row may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 29C
Assessments of Payment Instruments: Control Over Payment Timing
 Percentage of consumers

	Very Low Control	Low Control	Neither Low nor High Control	High Control	Very High Control
Cash					
2008 ^r	10.0	9.7	13.7	16.4	50.2
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Check					
2008 ^r	6.0	24.8	26.4	30.1	12.7
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Debit card					
2008 ^r	7.5	12.3	20.5	36.3	23.4
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Credit card					
2008 ^r	5.8	14.2	22.0	38.5	19.6
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Prepaid card					
2008 ^r	10.4	13.0	32.2	25.9	18.5
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Electronic deduction*					
2008 ^r	8.6	11.9	21.9	29.2	28.4
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na

* In 2008 respondents were asked to assess "electronic deduction." In the 2009 and 2010 SCPC, we disaggregated the rating of electronic deduction into "bank account number payment" and "online banking bill payment."

NOTES: Superscript "r" denotes that numbers in the row may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

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Table 29D
Assessments of Payment Instruments: Convenience*
 Percentage of consumers

	Very Inconvenient	Inconvenient	Neither Inconvenient nor Convenient	Convenient	Very Convenient
Cash					
2008 ^r	<i>1.5</i>	<i>7.8</i>	<i>16.8</i>	<i>24.9</i>	<i>49.0</i>
2009 ^r	3.0	5.8	14.3	20.8	56.1
2010.....	5.5	9.9	14.7	25.8	44.0
Check					
2008 ^r	<i>2.4</i>	<i>20.3</i>	<i>28.1</i>	<i>35.4</i>	<i>13.9</i>
2009 ^r	4.9	15.3	28.0	30.8	20.9
2010.....	10.3	23.7	21.8	28.7	15.5
Debit card					
2008 ^r	<i>2.0</i>	<i>2.5</i>	<i>15.1</i>	<i>31.8</i>	<i>48.5</i>
2009 ^r	2.3	2.3	12.8	29.3	53.3
2010.....	3.1	2.4	10.3	30.2	54.0
Credit card					
2008 ^r	<i>1.5</i>	<i>2.7</i>	<i>10.8</i>	<i>33.1</i>	<i>51.9</i>
2009 ^r	2.6	1.9	10.2	29.7	55.6
2010.....	3.7	2.8	9.6	30.3	53.6
Prepaid card					
2008 ^r	<i>4.5</i>	<i>8.5</i>	<i>33.1</i>	<i>25.6</i>	<i>28.2</i>
2009 ^r	5.0	9.9	31.1	24.6	29.5
2010.....	9.1	14.9	28.2	24.3	23.5
Bank account number payment					
2008 ^r	<i>5.9</i>	<i>10.3</i>	<i>28.0</i>	<i>27.9</i>	<i>27.9</i>
2009 ^r	12.6	20.8	30.9	19.8	16.0
2010.....	15.5	21.2	30.0	19.4	13.9
Online banking bill payment					
2008 ^r	<i>5.9</i>	<i>10.3</i>	<i>28.0</i>	<i>27.9</i>	<i>27.9</i>
2009 ^r	6.6	7.6	25.7	27.3	32.9
2010.....	6.2	6.7	18.5	27.0	41.6

* In 2008, the survey referred to this concept as "Ease of use". The numbers are not directly comparable due to differences in the definitions of "Ease of use" and "Convenience."

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Table 29E
Assessments of Payment Instruments: Cost
 Percentage of consumers

	Very High Cost	High Cost	Neither High nor Low Cost	Low Cost	Very Low Cost
Cash					
2008 ^r	1.5	4.9	17.9	8.3	67.5
2009 ^r	1.4	2.7	14.8	9.2	71.9
2010.....	0.7	2.0	16.3	9.5	71.5
Check					
2008 ^r	1.7	13.1	21.7	41.4	22.1
2009 ^r	2.3	7.7	21.8	37.6	30.5
2010.....	1.7	6.7	21.5	42.3	27.8
Debit card					
2008 ^r	2.3	10.5	24.4	31.2	31.7
2009 ^r	2.7	8.1	23.5	30.0	35.7
2010.....	1.6	7.0	22.3	34.5	34.6
Credit card					
2008 ^r	21.0	32.7	16.1	17.7	12.6
2009 ^r	23.5	31.3	16.0	14.1	15.1
2010.....	18.2	28.1	19.5	17.8	16.4
Prepaid card					
2008 ^r	4.7	<i>16.3</i>	<i>44.5</i>	<i>17.4</i>	<i>17.1</i>
2009 ^r	5.0	13.9	36.5	23.2	21.4
2010.....	4.4	14.1	37.6	22.1	21.8
Bank account number payment*					
2008 ^r	3.2	9.8	<i>31.2</i>	<i>23.2</i>	<i>32.6</i>
2009 ^r	4.6	6.0	35.0	24.5	29.8
2010.....	3.1	5.0	38.7	23.2	30.0
Online banking bill payment*					
2008 ^r	3.2	9.8	<i>31.2</i>	<i>23.2</i>	<i>32.6</i>
2009 ^r	3.2	6.9	27.3	25.1	37.5
2010.....	2.7	4.2	28.5	25.1	39.4

* In 2008 respondents were asked to assess "electronic deduction." In the 2009 and 2010 SCPC, we disaggregated the rating of electronic deduction into "bank account number payment" and "online banking bill payment."

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Table 29F
Assessments of Payment Instruments: Payment Records
 Percentage of consumers

	Very Poor Records	Poor Records	Neither Good nor Poor	Good Records	Very Good Records
Cash					
2008 ^r	31.1	22.6	23.7	12.0	10.6
2009.....	na	na	na	na	na
2010.....	36.8	21.6	20.8	10.7	10.2
Check					
2008 ^r	1.0	5.2	11.6	46.2	36.0
2009.....	na	na	na	na	na
2010.....	0.6	3.1	11.0	46.2	39.0
Debit card					
2008 ^r	2.9	5.5	18.5	40.2	32.9
2009.....	na	na	na	na	na
2010.....	1.7	4.0	13.1	41.7	39.5
Credit card					
2008 ^r	0.9	4.3	10.1	40.2	44.4
2009.....	na	na	na	na	na
2010.....	1.3	2.7	8.5	38.1	49.3
Prepaid card					
2008 ^r	<i>11.9</i>	<i>20.5</i>	<i>40.5</i>	<i>13.8</i>	<i>13.3</i>
2009.....	na	na	na	na	na
2010.....	19.6	18.7	34.7	16.8	10.2
Bank account number payment*					
2008 ^r	2.8	6.9	21.6	33.0	35.8
2009.....	na	na	na	na	na
2010.....	3.2	5.2	21.1	36.9	33.5
Online banking bill payment*					
2008 ^r	2.8	6.9	21.6	33.0	35.8
2009.....	na	na	na	na	na
2010.....	2.2	2.8	14.2	35.9	44.9

* In 2008 respondents were asked to assess "electronic deduction." In the 2009 and 2010 SCPC, we disaggregated the rating of electronic deduction into "bank account number payment" and "online banking bill payment."

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Table 29G
Assessments of Payment Instruments: Payment Speed
 Percentage of consumers

	Very Slow	Slow	Neither Slow nor Fast	Fast	Very Fast
Cash					
2008 ^r	1.1	4.9	16.1	22.0	55.9
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Check					
2008 ^r	8.7	30.2	33.0	21.8	6.4
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Debit card					
2008 ^r	2.0	6.0	17.2	40.7	34.1
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Credit card					
2008 ^r	2.1	6.8	15.8	42.0	33.3
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Prepaid card					
2008 ^r	4.6	6.7	30.3	33.2	25.2
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na
Electronic deduction					
2008 ^r	3.4	9.5	26.8	27.0	33.3
2009.....	na	na	na	na	na
2010.....	na	na	na	na	na

NOTES: Superscript "r" denotes that numbers in the row may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 29H
Assessments of Payment Instruments: Security
 Percentage of consumers

	Very Risky	Risky	Neither Risky nor Secure	Secure	Very Secure
Cash					
2008 ^r	42.4	15.2	13.2	8.5	20.7
2009 ^r	32.8	12.1	13.4	10.2	31.5
2010.....	37.3	16.8	11.9	9.1	24.8
Check					
2008 ^r	12.2	35.1	18.9	25.5	8.2
2009 ^r	12.3	31.7	18.5	30.1	7.4
2010.....	7.6	34.4	22.3	26.4	9.2
Debit card					
2008 ^r	13.0	30.9	19.3	28.5	8.3
2009 ^r	15.4	27.5	19.8	26.7	10.5
2010.....	9.2	28.6	18.0	32.2	12.1
Credit card					
2008 ^r	14.8	29.2	15.0	29.5	11.5
2009 ^r	17.9	27.4	16.3	27.2	11.2
2010.....	11.8	26.1	15.3	33.1	13.7
Prepaid card					
2008 ^r	25.3	23.7	26.0	16.1	9.0
2009 ^r	21.6	19.5	25.3	20.2	13.5
2010.....	21.1	23.2	25.4	18.8	11.5
Bank account number payment*					
2008 ^r	<i>10.5</i>	<i>20.3</i>	22.7	26.2	<i>20.3</i>
2009 ^r	32.3	28.9	17.0	15.0	6.7
2010.....	23.8	31.0	17.4	18.5	9.2
Online banking bill payment*					
2008 ^r	<i>10.5</i>	<i>20.3</i>	22.7	26.2	<i>20.3</i>
2009 ^r	16.9	22.6	19.7	26.2	14.6
2010.....	12.1	20.9	20.1	30.9	16.0

* In 2008 respondents were asked to assess "electronic deduction." In the 2009 and 2010 SCPC, we disaggregated the rating of electronic deduction into "bank account number payment" and "online banking bill payment."

NOTES: Superscript "r" denotes that numbers in the row may have been revised since the last time they were published. Numbers in italics are not comparable across years due to changes in the survey questionnaire or methodology. Numbers may not sum exactly due to rounding or missing values.

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Table 29I
Assessments of Payment Locations: Security
 Percentage of consumers

	Very Risky	Risky	Neither Risky nor Secure	Secure	Very Secure
In person					
2008.....	na	na	na	na	na
2009.....	na	na	na	na	na
2010.....	0.2	2.0	8.5	26.3	63.0
Online					
2008.....	na	na	na	na	na
2009.....	na	na	na	na	na
2010.....	11.2	25.2	14.6	38.8	10.2
By mail					
2008.....	na	na	na	na	na
2009.....	na	na	na	na	na
2010.....	7.6	25.7	27.5	34.4	4.9
By phone					
2008.....	na	na	na	na	na
2009.....	na	na	na	na	na
2010.....	9.9	32.3	27.2	25.7	4.9
Mobile					
2008.....	na	na	na	na	na
2009.....	na	na	na	na	na
2010.....	18.0	37.9	26.3	15.0	2.8

NOTES: Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 29J
Assessment of Debit Authorization Mode
 Percentage of consumers

	Security	Very Risky	Risky	Neither Risky nor Secure	Secure	Very Secure
PIN debit card						
2008.....		na	na	na	na	na
2009.....		na	na	na	na	na
2010.....		5.3	14.9	16.1	40.6	23.2
Signature debit card						
2008.....		na	na	na	na	na
2009.....		na	na	na	na	na
2010.....		3.8	16.6	28.2	37.3	14.1
No PIN and no signature debit card						
2008.....		na	na	na	na	na
2009.....		na	na	na	na	na
2010.....		41.4	34.3	13.5	7.4	3.4
Using a debit card online						
2008.....		na	na	na	na	na
2009.....		na	na	na	na	na
2010.....		20.1	37.5	21.8	17.0	3.6

NOTES: Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 29K
Preferred Way of Authorizing Debit Card Payments
 Percentage of consumers

	2008	2009	2010
PIN.....	na	na	45.9
Signature.....	na	na	30.4
Either one is fine/I'm indifferent.....	na	na	19.6
Neither one/ I prefer not to enter a PIN or give my signature.....	na	na	4.2

NOTES: Numbers may not sum exactly due to rounding or missing values. The notation "na" indicates that the estimate is not available.

Table 30
Demographics: Gender, Age, Race, and Education*
 Percentage of consumers

	2008 ^r	2009 ^r	2010
Gender			
Male.....	48.3	48.3	48.4
Female.....	51.7	51.7	51.6
Age			
18–24.....	9.8	9.2	8.0
25–34.....	19.7	21.7	22.9
35–44.....	18.9	17.2	16.7
45–54.....	20.0	19.4	19.2
55–64.....	14.9	15.6	16.0
65 and older.....	16.8	16.8	17.2
Race			
White.....	74.2	72.9	73.2
Black.....	16.9	15.6	15.6
Asian.....	3.8	2.8	2.7
Other.....	5.1	8.8	8.4
Ethnicity			
Hispanic or Latino.....	9.8	12.8	12.8
Education			
No high school diploma.....	7.6	6.9	5.1
High school.....	37.5	38.0	38.9
Some college.....	28.0	28.0	28.3
College.....	14.0	15.2	15.2
Post-graduate study.....	12.9	12.0	12.5

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

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers may not sum exactly due to rounding or missing values.

Table 31
Income and Labor Force Status*
 Percentage of consumers

	2008 ^r	2009 ^r	2010
Household income			
Less than \$25,000.....	21.0	24.9	24.4
\$25,000–\$49,999.....	27.6	27.3	27.4
\$50,000–\$74,999.....	17.7	21.1	21.1
\$75,000–\$99,999.....	16.3	11.9	12.1
\$100,000–\$124,999.....	7.8	5.7	7.4
\$125,000 or more.....	9.4	9.1	7.6
\$125,000–\$199,999.....	6.4	6.2	4.9
\$200,000 or more.....	2.9	2.9	2.7
Respondent income			
Highest in household.....	54.9	48.6	49.5
About equal to highest.....	11.4	12.9	13.9
2nd highest.....	26.0	25.9	25.4
3rd highest or lower.....	7.7	12.7	11.3
Labor force status			
Working now.....	69.3	76.3	62.5
Unemployed and looking for work.....	2.1	1.4	9.4
Temporarily laid off, on sick or other leave.....	0.1	0.3	1.2
Disabled.....	3.5	3.2	6.9
Retired.....	18.5	14.7	18.7
Homemaker.....	4.5	2.7	9.5
Other.....	2.2	1.4	2.9

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

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers may not sum exactly due to rounding or missing values.

Table 32
Consumers' Financial Responsibility in the Household
 Percentage of consumers

	2008 ^r	2009 ^r	2010
Budgeting			
All.....	44.9	43.0	44.3
Most.....	12.9	13.1	12.6
Shared equally.....	21.0	23.5	22.5
Some.....	14.6	9.7	10.6
None.....	6.6	10.6	10.0
Bill payment			
All.....	49.9	47.7	48.2
Most.....	9.4	10.6	10.6
Shared equally.....	15.7	14.1	16.3
Some.....	14.8	13.6	13.4
None.....	10.3	14.0	11.5
Shopping			
All.....	39.3	37.5	37.4
Most.....	12.7	14.0	16.1
Shared equally.....	26.2	23.8	22.6
Some.....	16.3	18.4	17.4
None.....	5.5	6.3	6.5
Asset management			
All.....	40.5	36.6	37.5
Most.....	11.5	10.1	10.7
Shared equally.....	23.4	22.3	23.4
Some.....	10.0	9.7	8.8
None.....	14.5	21.3	19.6

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers may not sum exactly due to rounding or missing values.

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Table 33
Selected Assets and Liabilities
 Percentage of consumers, except as noted

	2008 ^r	2009 ^r	2010
Credit card debt			
Carried unpaid balance at any time during the past 12 months	58.1	39.9	38.7
Mean credit card balance unpaid, previous month (dollars)			
Per credit card adopter.....	3,702	4,384	4,149
Per adopter with unpaid balance.....	6,392	7,797	7,537
Median credit card balance unpaid, previous month (dollars)			
Per credit card adopter.....	94	183	149
Per adopter with unpaid balance.....	2,434	3,960	3,230
Change in unpaid balance since a year ago			
Much lower.....	18.2	12.0	13.4
Lower.....	26.8	26.3	28.8
About the same.....	27.4	30.0	31.7
Higher.....	17.0	19.8	17.2
Much higher.....	10.7	11.9	8.9
Home ownership			
Home ownership rate	72.2	67.3	65.3

NOTES: Superscript "r" denotes that numbers in the column may have been revised since the last time they were published. Numbers may not sum exactly due to rounding or missing values.