

Consumer Payment Choice: A Central Bank Perspective

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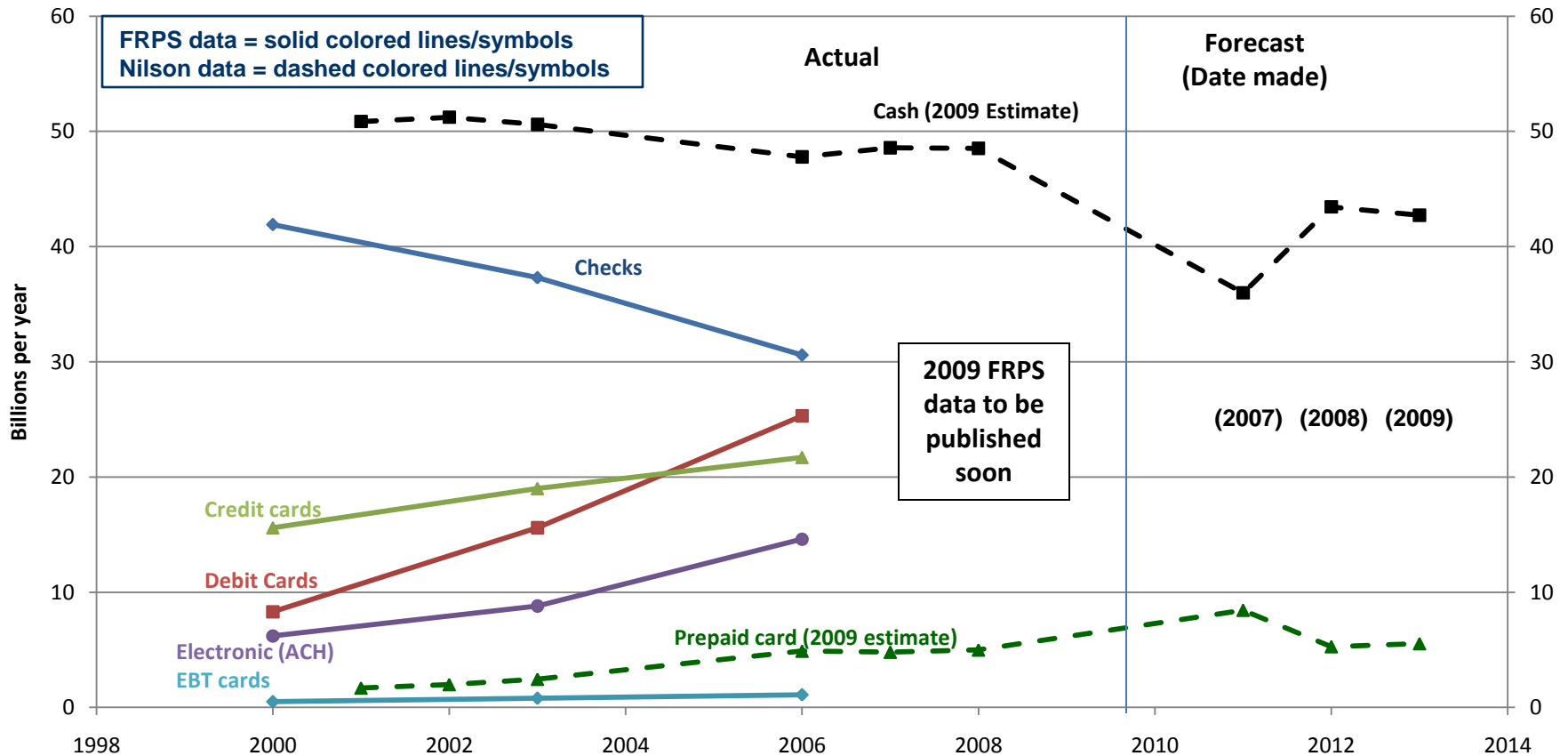
Presentation overview

- Survey of Consumer Payment Choice (SCPC)
- Payments Transformation: Consumer view
- Fun facts about cash and consumers
- Future plans

U.S. payments volume

Payment Transformation: Cards and electronics are replacing paper

Number of US payments by all sectors (household, business, govt.)



SOURCES: 2006 Federal Reserve Payment Study (FRPS), 2009 Nilson

2008 SCPC official tables

Public Policy

Discussion Papers



No. 09-10

The 2008 Survey of Consumer Payment Choice

Kevin Foster, Erik Meijer, Scott Schuh, and Michael A. Zabek

Abstract:

This paper presents the 2008 version of the Survey of Consumer Payment Choice (SCPC), a nationally representative survey developed by the Consumer Payments Research Center of the Federal Reserve Bank of Boston and implemented by the RAND Corporation with its American Life Panel. The survey fills a gap in knowledge about the role of consumers in the transformation of payments from paper to electronic by providing a broad-based assessment of U.S. consumers' adoption and use of nine payment instruments, including cash. The average consumer has 5.1 of the nine instruments, and uses 4.2 in a typical month. Consumers make 53 percent of their monthly payments with a payment card (credit, debit, and prepaid). More consumers now have debit cards than credit cards, and consumers use debit cards more often than cash, credit cards, or checks individually. Cash, checks, and other paper instruments are still popular and account for 37 percent of consumer payments. Most consumers have used newer electronic payments, such as online banking bill payment, but they only account for 10 percent of consumer payments. Security and ease of use are the characteristics of payment instruments that consumers rate as the most important.

JEL Classifications: D12, D14, E42

<http://www.bos.frb.org/economic/ppdp/2009/ppdp0910.htm>

SCPC overview

- *Survey of Consumer Payment Choice (SCPC)*
 - Annual data for 2008-2010 available to public for free
 - Representative panel of U.S. consumers, age 18+
 - Adoption & use for 9 payment instruments
 - Two types of data:
 - Aggregate data for macroeconomic and trend analysis
 - Consumer-level data for microeconomic and policy analysis
 - Fills a niche not covered by other sources, e.g.
 - *Survey of Consumer Finances (SCF)* – not much payments data
 - *Federal Reserve Payments Studies (FRPS)* – includes bus. & govt.

SCPC payment instruments

Paper

1. Cash
2. Check
3. Money order
4. Traveler's check

Cards

5. Debit
6. Credit
7. Prepaid (including EBT)

Electronic (ACH-based use of bank accounts)

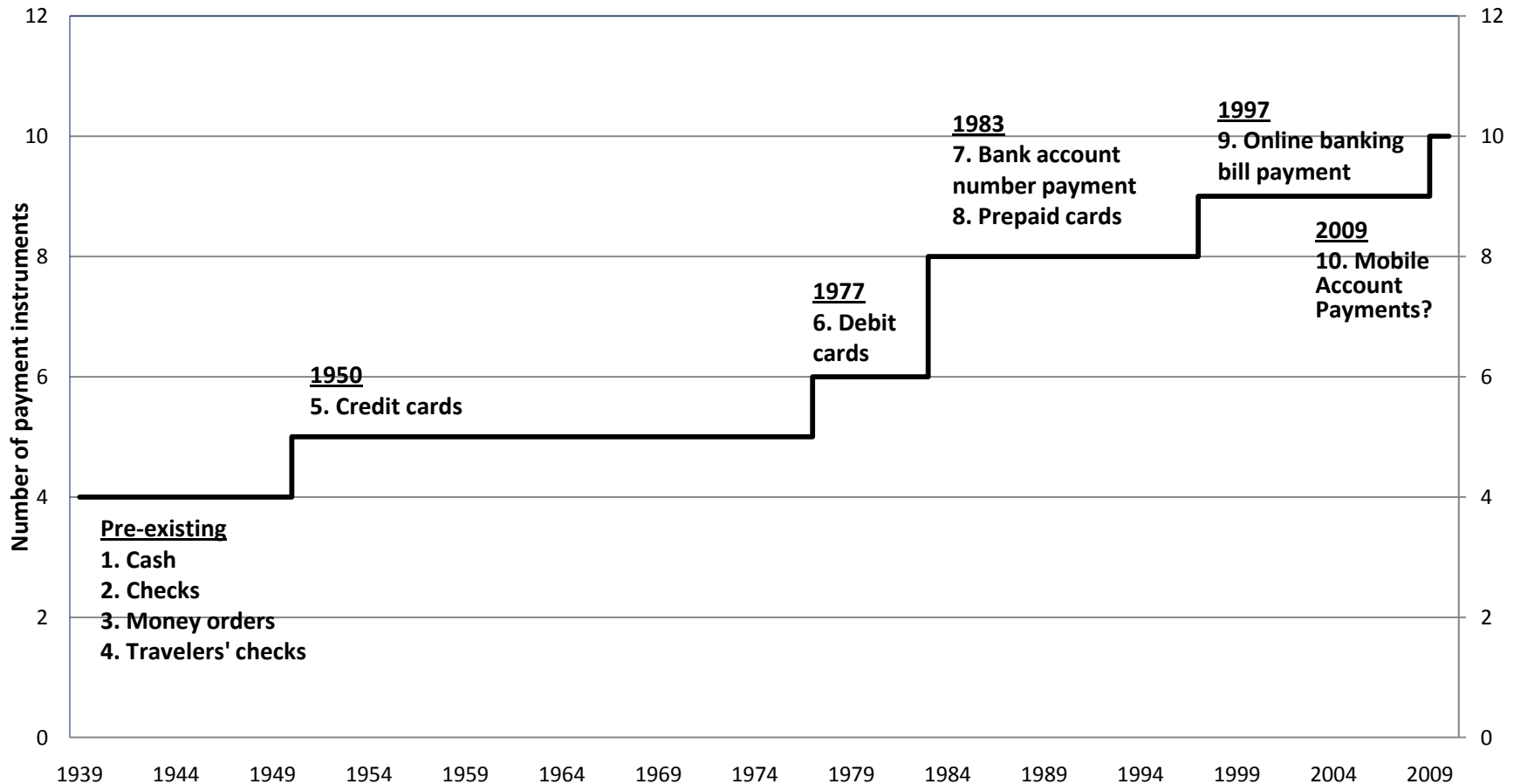
8. Online banking bill payment (OBBP)
Consumer initiates payment from "inside" bank (w/o disclosing BA number)
9. Bank account number payment (BANP)
Consumer uses BAN to authorize third-party payment

Payment concepts

- **Adoption** – “Do you have...?”
 - *Historical* – ever had?
 - *Current* – have now?
 - *Discarding* – ever discarded? (historical minus current)
- **Use** – “How many payments do you make...?”
 - *Incidence* – use at least once during a period? (yes or no)
 - *Frequency* – intensity of use in a period (# of payments)
 - Dollar value of payments not collected (time limited, more difficult)

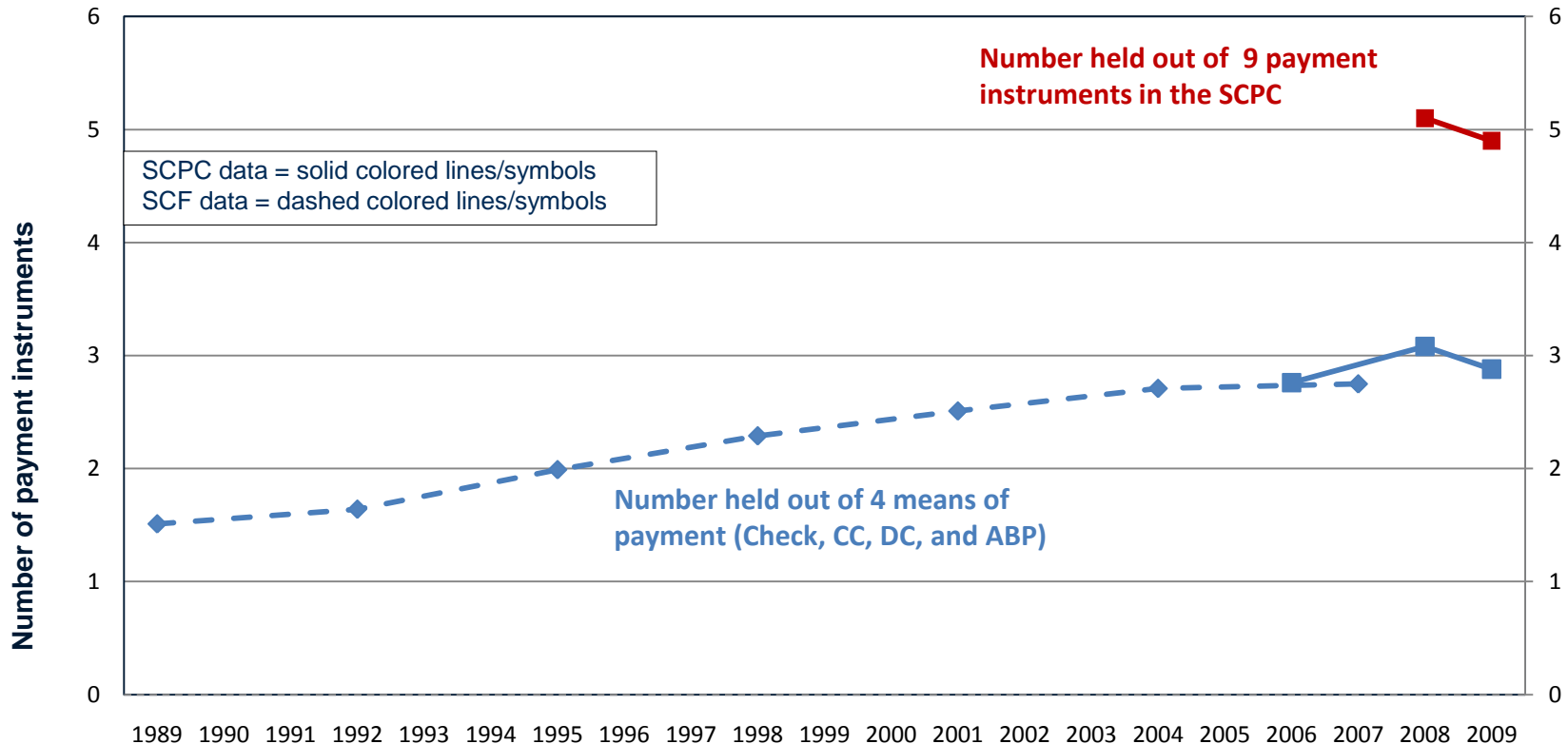
History of payment instruments

Consumers have more payment instruments to choose from...



Payment instruments per consumer

...and consumers are holding more payment instruments



SOURCES: 1983-2007 Survey of Consumer Finances; 2006, 2008-2009 Survey of Consumer Payment Choice, subject to revision. See 2008 SCPC Table 8.

Mobile banking/payments

Is a mobile phone a “payment instrument”? (No...and maybe?)

	<u>2009</u>	<u>2008</u>
● Bank account adopters	93.0%	93.8%
● Mobile banking adopters	10.2%	8.2%
– Used mobile banking last 12 mos.	8.9%	n.a.
● Cell phone adopters	89.5%*	n.a.
– Mobile payment adopters	3.0%	n.a.
● Paid using SMS/Text**	2.0%	
● Paid via contactless mobile	1.1%	

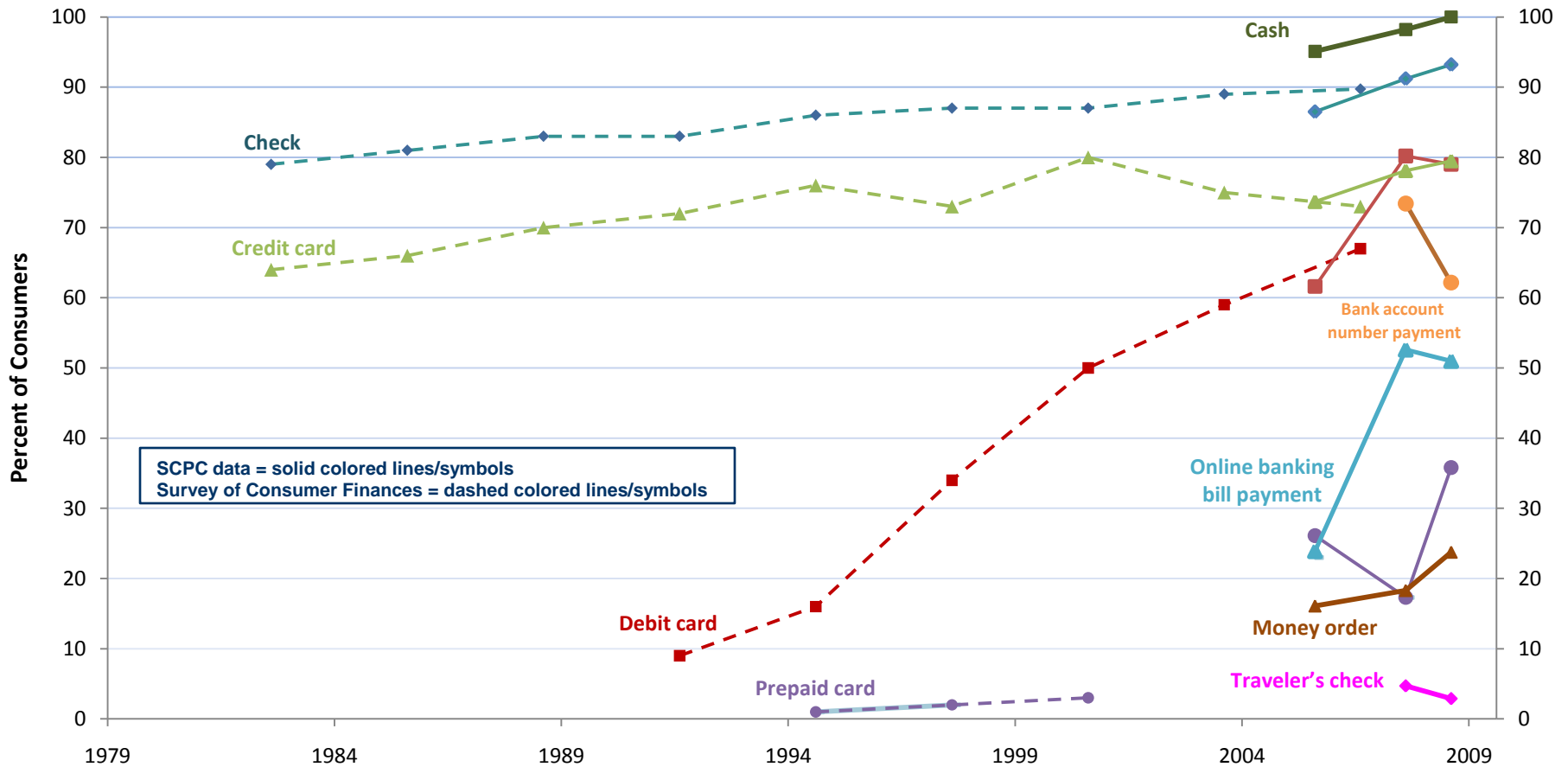
*Consistent with industry estimates of mobile phone subscribers by household

** *Before Haiti earthquake*

SOURCE: Crowe, M., M. Rysman, & J. Stavins (2010). “Mobile Payments in the United States at Retail Point of Sale: Current Market & Future Prospects.” Federal Reserve Bank of Boston, PPDP No. 10-2 (forthcoming in *Review of Network Economics*).

Adoption of payment instruments

Consumers are adding new instruments but not dropping old ones...

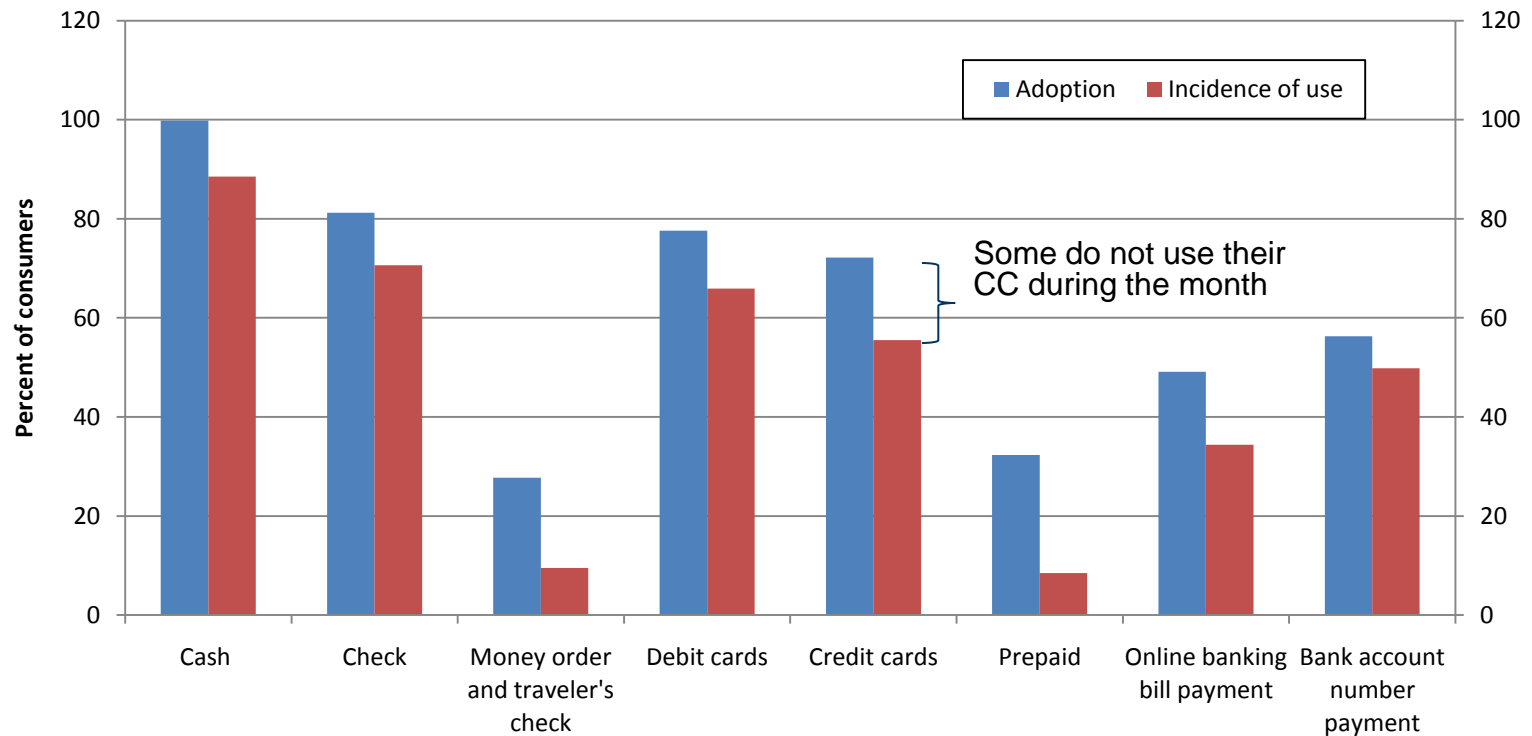


SOURCES: 1983-2007 Survey of Consumer Finances; 2006, 2008, and 2009 Survey of Consumer Payment Choice, subject to revision. See 2008 SCPC Table 4.

Incidence of use, 2009

Not all consumers use their payment instruments every month

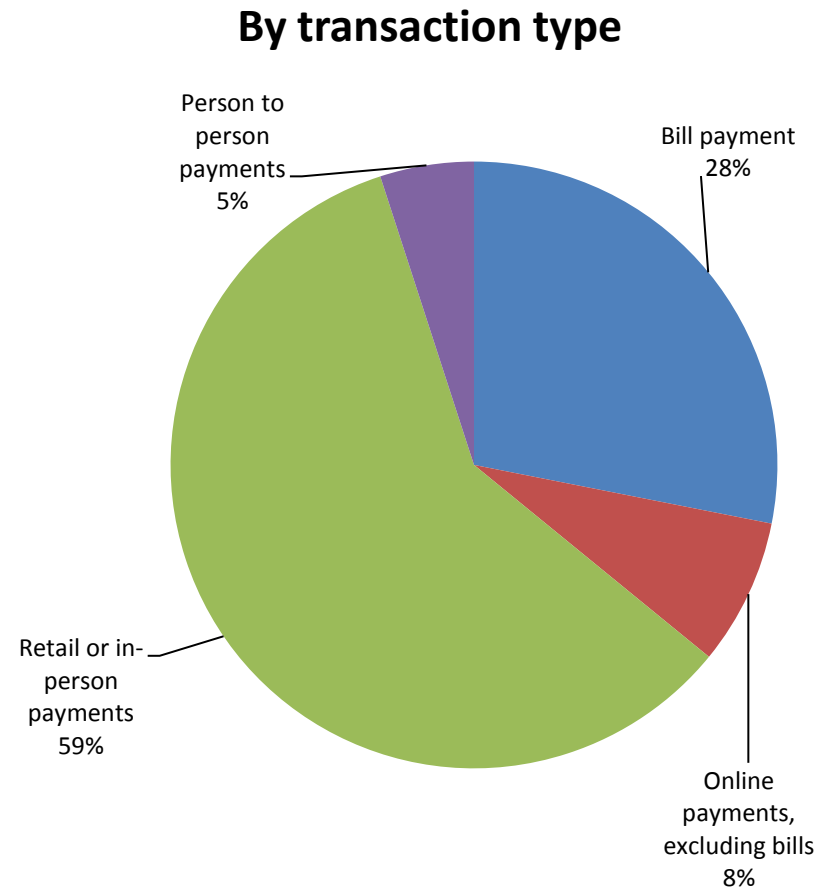
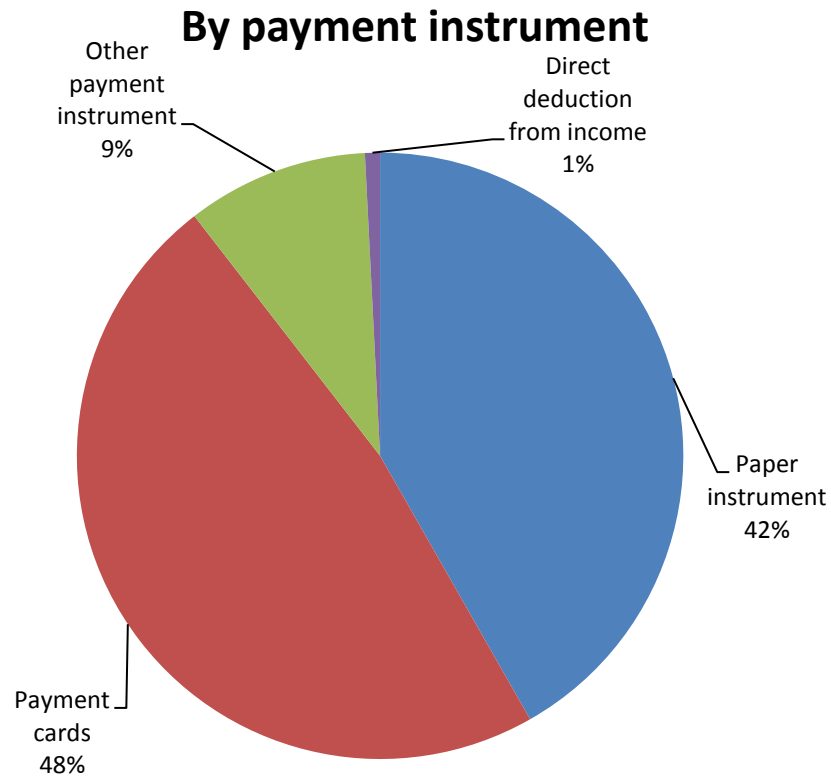
Adoption and monthly incidence of use for payment instruments



SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision. See 2009 SCPC Tables 4 and 13.

Payment use, 2009

Shares of monthly payment volume by instrument and transaction

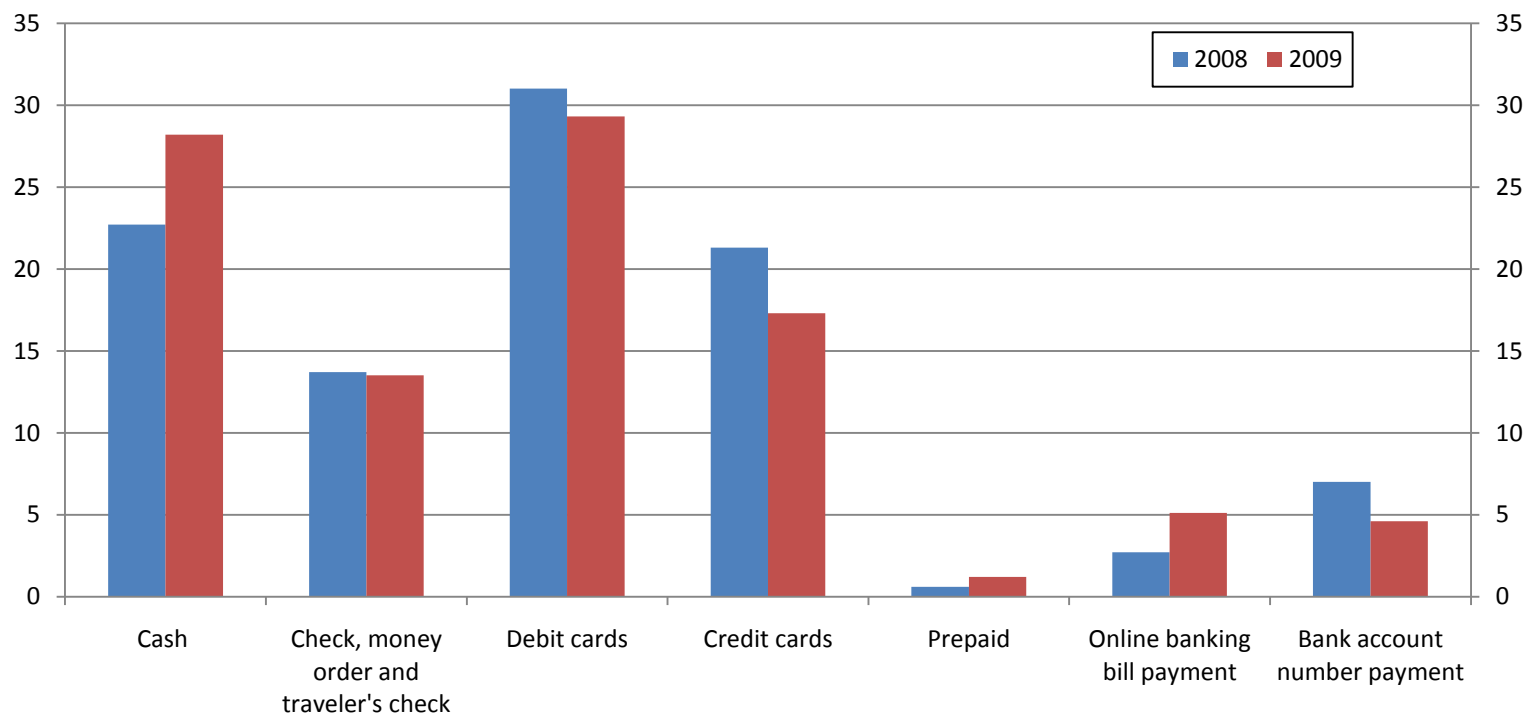


SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision . See 2009 SCPC Tables 18 and 19.

Changes in payment use, 2008-2009

Consumers increased their use of cash in 2009

Shares of monthly volume of payments, by instrument



SOURCE: 2008-2009 Survey of Consumer Payment Choice statistics subject to revision. See 2008 SCPC Tables 19, 21-23 and 2009 SCPC Tables 18, 19, 21 and 22.

Cash use, 2008-2009

Consumers make about one-quarter of their payments with cash, but the share varies widely by transaction category

Share of consumer payments made with cash (%)

	Year	Bill payments by mail or in person	Retail goods	Service and person-to-person	Service	Person to person	Cash share of all payments
Share of cash payments in category	2009	26	40	45	41	59	28
	2008	16	34	31	n.a.	n.a.	23

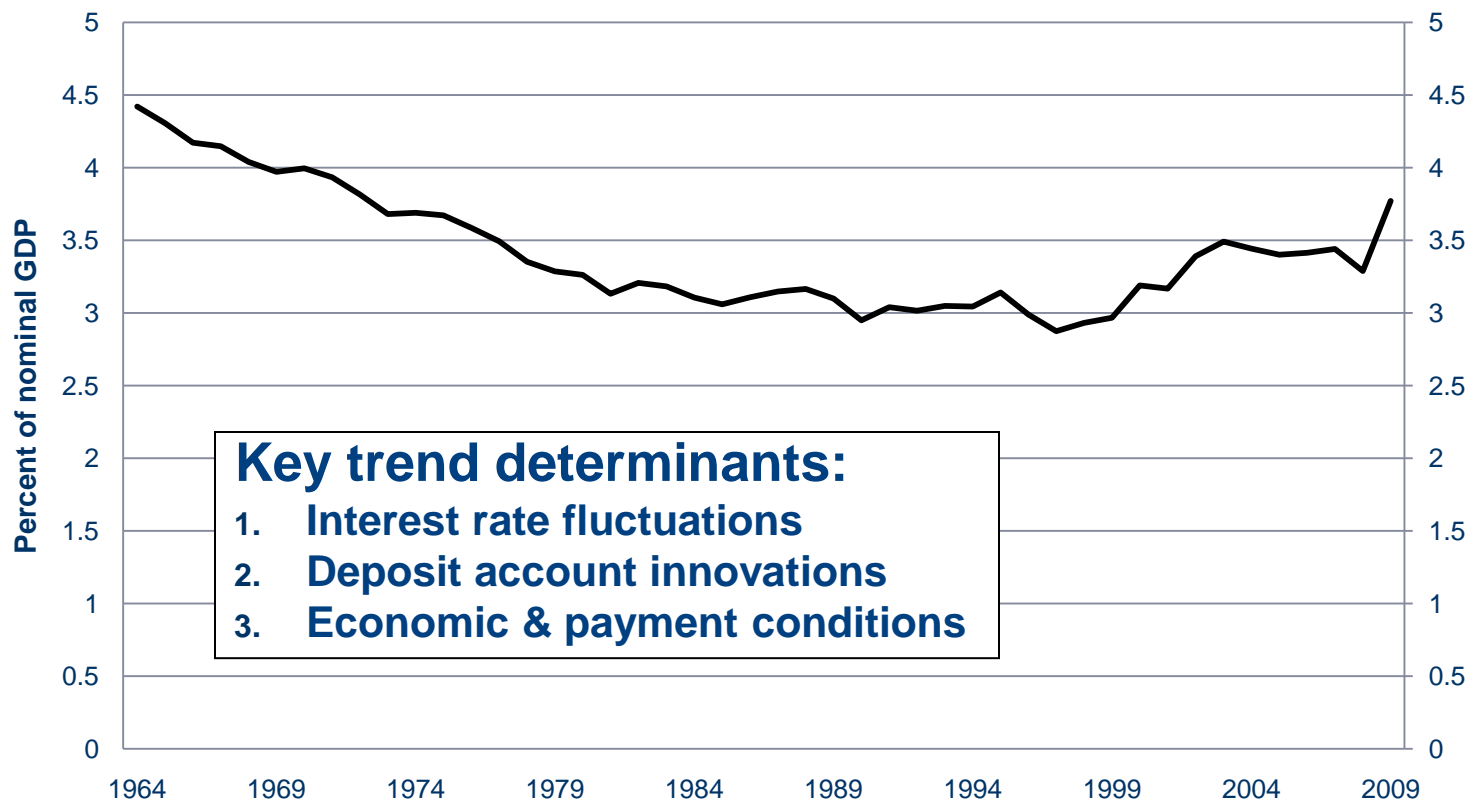
NOTE: Cash share of all payments in the transaction weighted average of cash shares in all categories (including those with zero share because cash is not accepted)

SOURCE: 2008-2009 Survey of Consumer Payment Choice statistics subject to revision. See 2008 SCPC Tables 19, 21-23 and 2009 SCPC Tables 18, 19, 21 and 22.

U.S. cash trends

After a long decline, cash in the economy is starting to increase

Nominal domestic U.S. currency in circulation



Cash management

Consumer holdings and withdrawals of cash increased in 2009

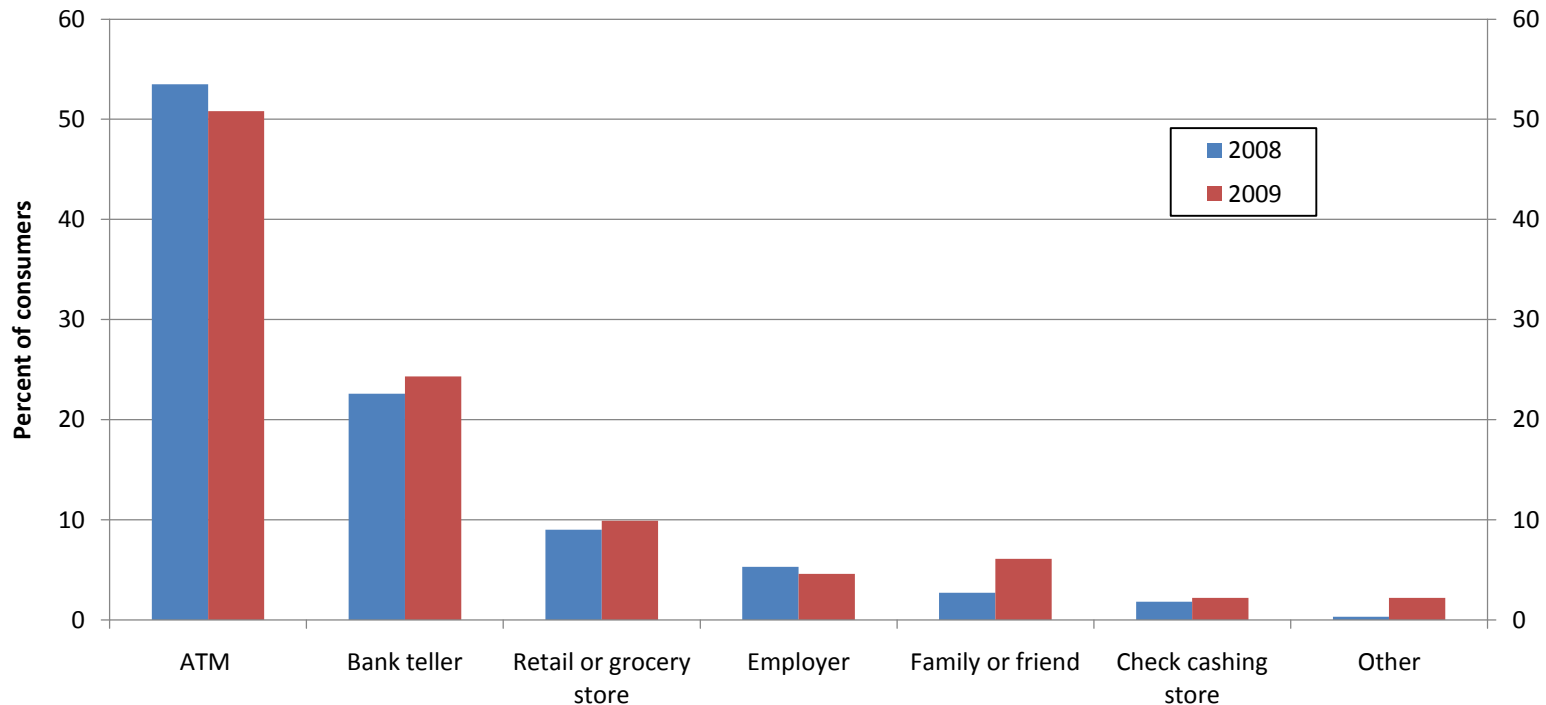
	Statistic	Current Cash Holdings			Typical Cash Withdrawals		
		Total (\$)	On Person (\$)	Other (\$)	Monthly Amount (\$)	Typical Amount (\$)	Monthly Frequency (#)
2009	Mean	291	69	229	436	102	5.2
	Median	78	34	19	217	60	4
2008	Mean	230	79	157	336	102	4.3
	Median	70	30	14	180	50	3

SOURCE: 2008-2009 Survey of Consumer Payment Choice; preliminary and unofficial statistics, subject to revision.

Cash withdrawal sources

Consumers mostly get cash from ATMs and banks

Primary sources of cash withdrawal, 2008-2009

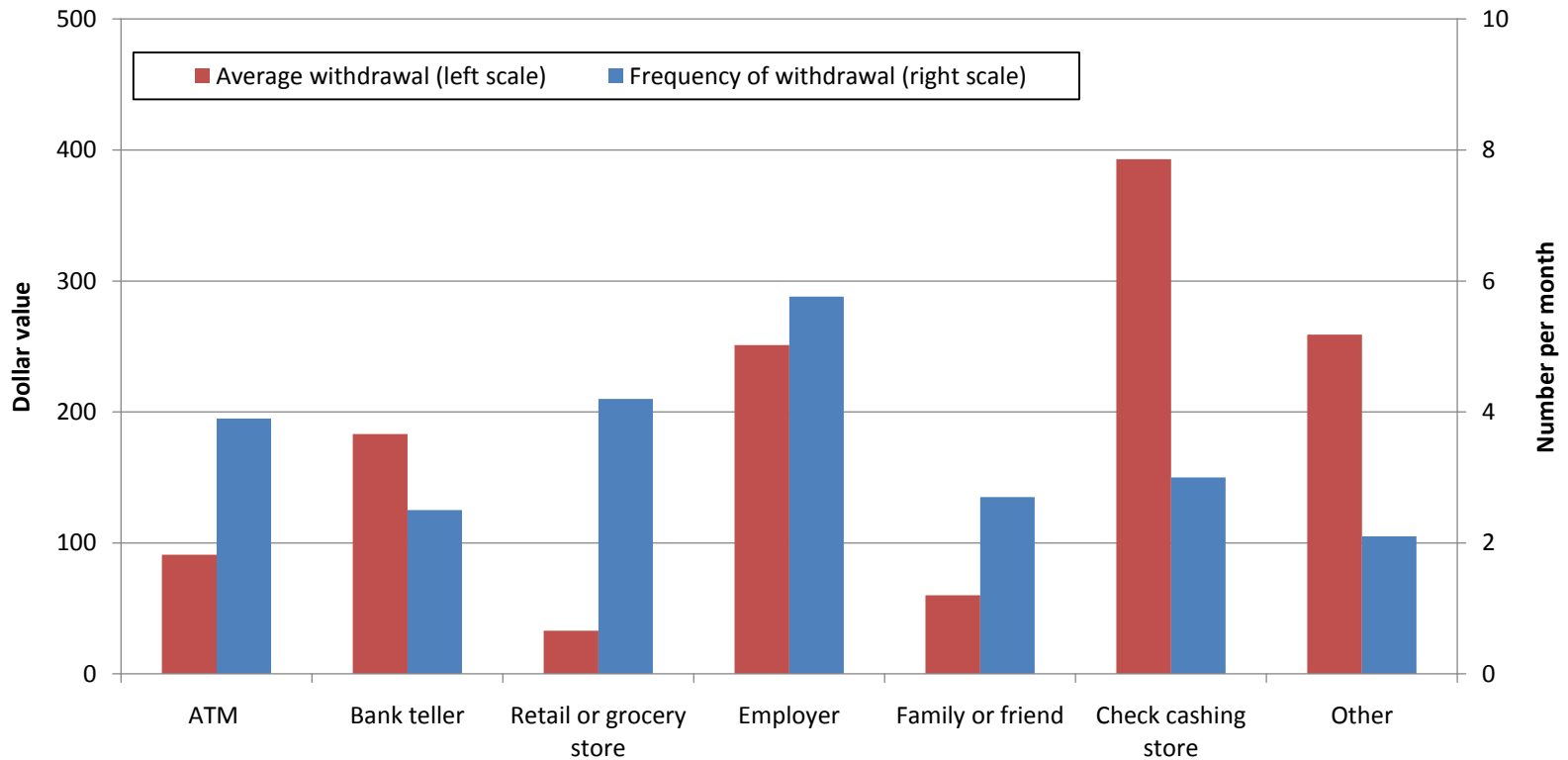


SOURCE: 2008-2009 Survey of Consumer Payment Choice statistics subject to revision . See 2008 SCPC Tables 13 and 2009 SCPC table 9.

Cash withdrawal behavior, 2009

Consumers' cash withdrawal behavior varies widely by location

Value and number of cash withdrawals in a typical month



SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision . See 2009 SCPC Tables 9.

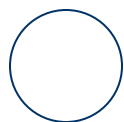
Payment characteristics

Consumers consider characteristics when choosing payments

2009	Acceptance for payment	Security	Cost	Convenience	AVG
Cash	4.6	2.9	4.5	4.2	4.0
AVG	3.8	2.8	3.7	3.8	3.9

2008	Acceptance for payment	Security	Cost	Ease of use	Record keeping	Control over payment	Speed	Acquisition & setup	AVG
Cash	4.6	2.5	4.5	4.2	2.4	4.0	4.4	4.4	3.9
AVG	4.0	2.9	3.7	3.9	3.6	3.6	3.8	3.8	3.7

NOTE: Ratings are on a 5-point scale (1 is lowest, 5 is highest)



= Significant determinants of cash use in prior research

SOURCE: 2008-2009 Survey of Consumer Payment Choice; preliminary and unofficial statistics, subject to revision.

Changes in check use, 2003–2006

Changes in cost and convenience partly explain check decline

SIMULATION	Estimated change in check share	Percent of actual change in check share
Actual change (0.310 to 0.226)	-0.084	100
Increase in number of payment instruments (0.25 per consumer)	-0.021	25
Decrease in relative convenience of checks (30 percent)	-0.029	34
Increase in relative cost of checks (30 percent)	-0.009	11

NOTE: Each simulation is independent and the results are not a complete decomposition of the actual change in check share.

SOURCE: Scott Schuh and Joanna Stavins, "Why Are (Some) Consumers (Finally) Writing Fewer Checks? The Role of Payment Characteristics," *Journal of Banking and Finance* (2010)

Future plans

Date	Projects
2010:Q4	<ul style="list-style-type: none">• Implement 2010 SCPC and DCPC• Publish 2009 SCPC tables• Publish SCPC overview paper
2011:Q1	<ul style="list-style-type: none">• Release 2009 SCPC micro data
2011:Q2	<ul style="list-style-type: none">• Board of Advisors meeting
2011:Q3	<ul style="list-style-type: none">• Publish 2010 SCPC tables• Publish 2010 DCPC tables
2011:Q4	<ul style="list-style-type: none">• Implement 2011 SCPC and DCPC• Release 2010 micro data

New in 2010:

The Diary of Consumer Payment Choice (DCPC) is a pilot study with 300 consumers tracking daily payments for 3 days each.

More information

To download this presentation, SCPC data, research papers, or more information about the

Consumer Payments Research Center Federal Reserve Bank of Boston

visit our web site:

<http://www.bos.frb.org/economic/cprc/index.htm>