Survey of Consumer Payment Choice: 2009 Results

Joanna Stavins, Senior Economist and Policy Adviser
Federal Reserve Bank of Boston

NEACH Payments Forum March 8, 2011





Disclaimer

The views presented here do not necessarily represent the views of the Federal Reserve Bank of Boston or the Federal Reserve System.





Outline of Presentation

- Payments landscape
- Survey of Consumer Payment Choice overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans





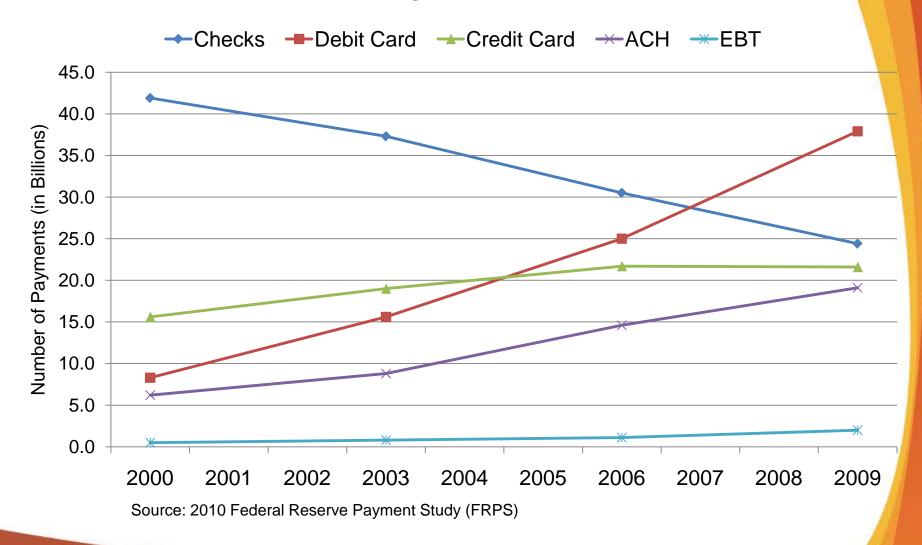
Payments landscape

- Survey of Consumer Payment Choice overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans





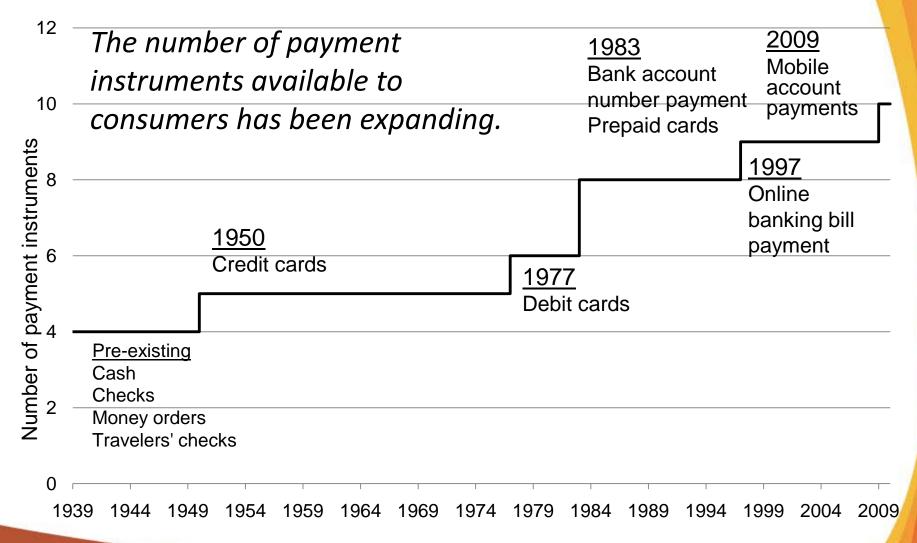
U.S. Payments Volume







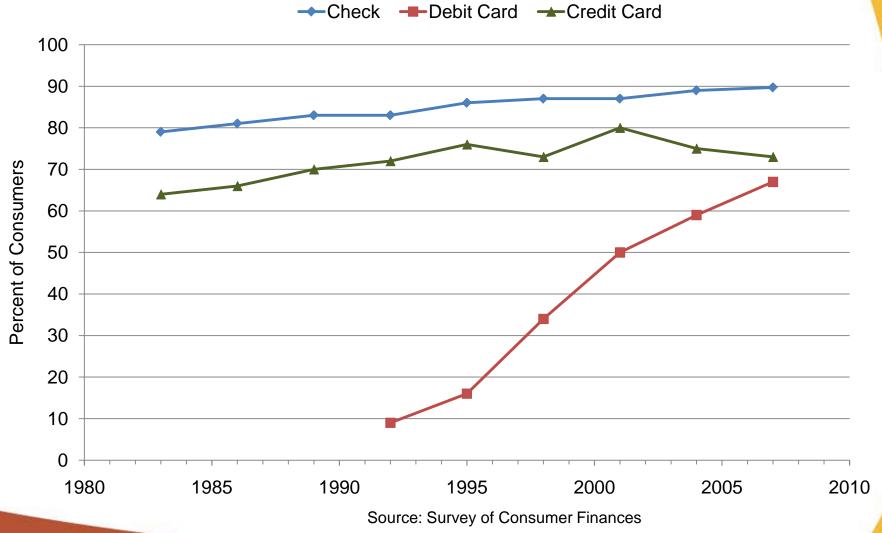
History of Payment Methods







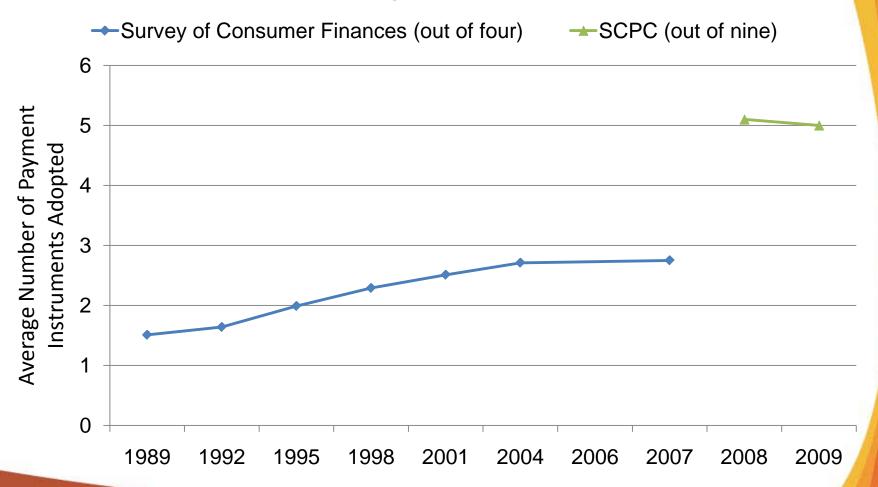
Historical Adoption of Payments





Payment Instruments Per Consumer

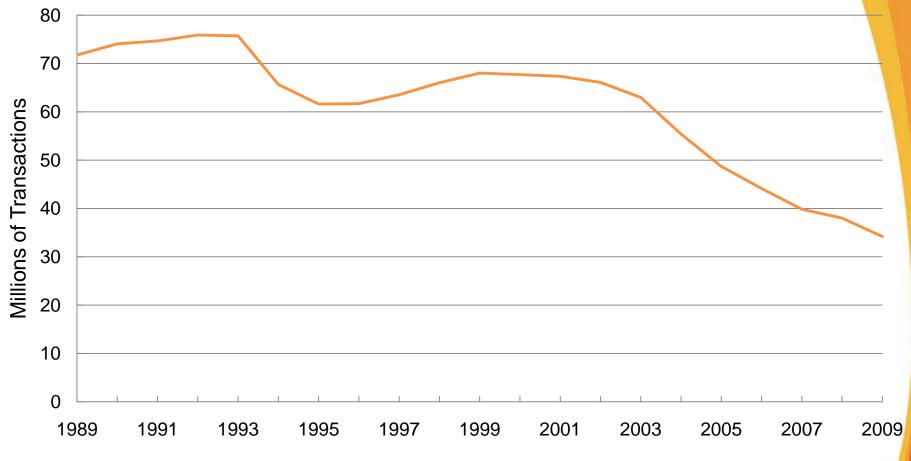
Consumers are holding more payment instruments

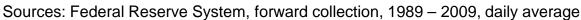






What Happened to Checks?









- Payments landscape
- Survey of Consumer Payment Choice: overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans





SCPC Overview

Survey of Consumer Payment Choice (SCPC)

- Annual data for 2008 2010, available to the public for free
- Representative panel of U.S. consumers, age 18+ (2,169 respondents)
- Adoption and use for nine payment instruments
- Two types of data:
 - Consumer level data for microeconomic and policy analysis
 - Averages and aggregate data for trend analysis
- Fills a niche not covered by other sources:
 - Survey of Consumer Finances (SCF) not much payments data
 - Federal Reserve Payments Studies (FRPS) includes business and government, only aggregate statistics





SCPC Payment Instruments

Paper

- 1. Cash
- 2. Checks
- 3. Money orders
- 4. Travelers' checks

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 bank website (no disclosure of bank account numbers).
- 9. Bank account number payment (BANP): Consumer uses bank account number to authorize third-party payment.





Payment Measures

- Adoption "Do you have...?"
 - Historical <u>ever</u> had?
 - Current have <u>now</u>?
 - 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 (number of payments)
 - > Dollar value of payments not collected





- Payments landscape
- Survey of Consumer Payment Choice overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans





Payment Instruments Portfolios

Consumers vary widely in their holding of payment instruments

% of	Number of Payment Instruments Adopted by the Consumer								
consumers	1	2	3	4	5	6	7	8	9
2008	3.3	3.7	4.6	13.2	27.9	35.0	9.9	2.4	0.0
2009	1.2	6.1	7.9	17.6	28.9	24.5	11.6	2.0	0.1

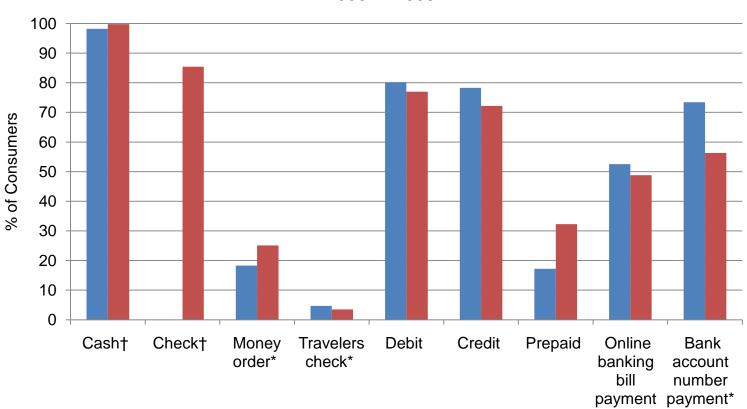
Source: 2008-2009 Survey of Consumer Payment Choice; data are preliminary and subject to revision.





Adoption

2008 2009



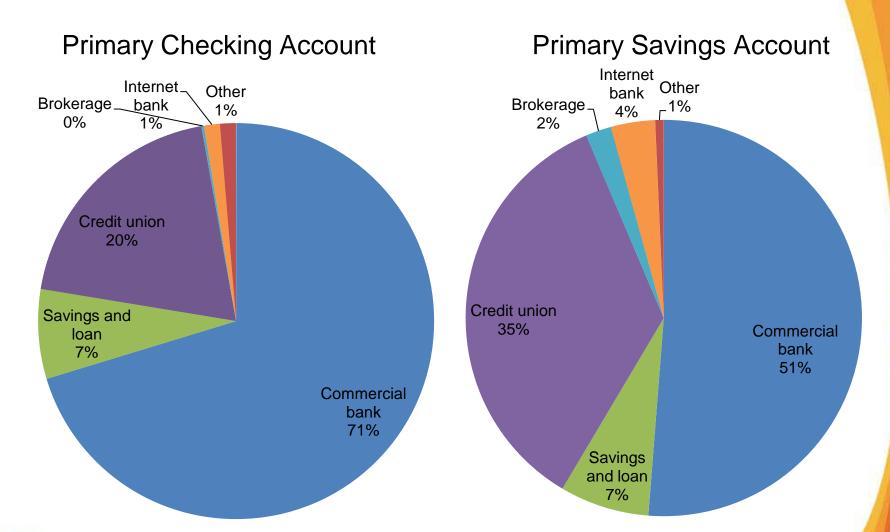
SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision. See 2009 SCPC Table 4.

- * Adoption is defined as the consumer having used the instrument in a given year.
- † Adoption is defined as the consumer having the instrument or having used the instrument in a given year.





Bank Account by Type of Financial Institution



Source: See 2009 SCPC Table 3





Mobile Payments

Mobile payments illustrate the difficulty of defining new instruments

•	Bank account adopters – Used mobile banking last 12 mos.	2009 93.6% 8.9%
•	Mobile banking adopters	10.2%
•	 Cell phone adopters Mobile payment adopters Paid using SMS/Text** Paid via contactless mobile 	89.5%* 3.0% 2.0% 1.1%

SOURCE: Crowe, M., M. Rysman, & J. Stavins (2010). "Mobile Payments in the United States at Retail Point of Sale" *Review of Network Economics*)





^{*}Consistent with industry estimates of mobile phone subscribers by household

^{**}Before Haiti earthquake

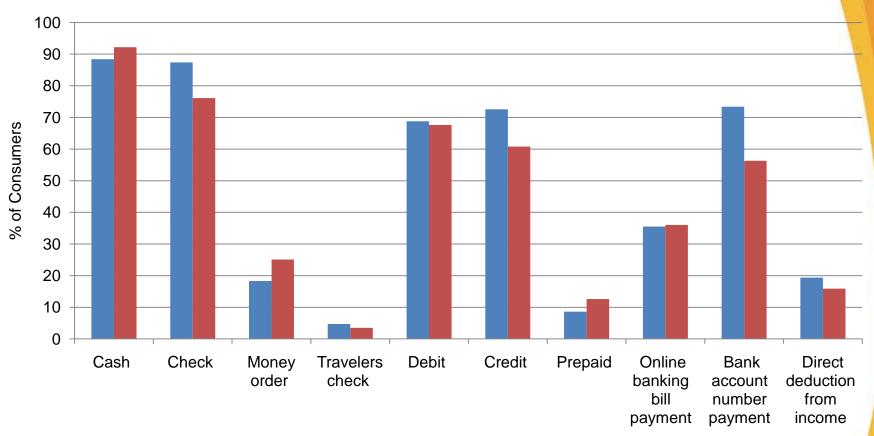
- Payments landscape
- Survey of Consumer Payment Choice overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans





Incidence of use

2008 2009



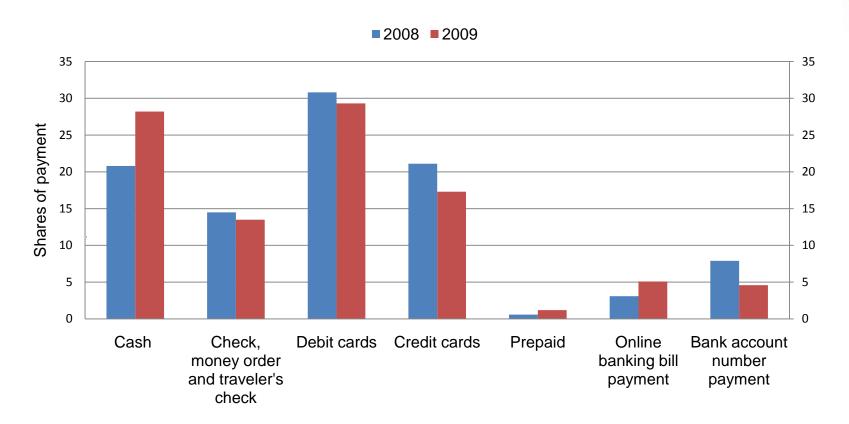
SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision. See 2009 SCPC Table 14. NOTE: Prepaid and bank account number payment incidence of use are not comparable between 2008 and 2009 due to changes in the survey questions.





Intensity of use: Shares

Consumers increased their use of cash in 2009



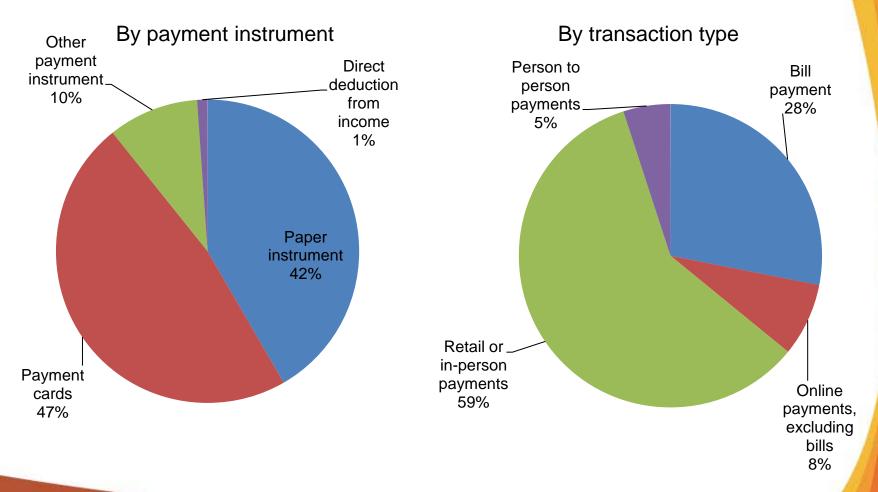
SOURCE: 2008-2009 Survey of Consumer Payment Choice; data are preliminary and subject to revision. See 2008 SCPC Tables 19, 21-23 and 2009 SCPC Tables 18, 19, 21 and 22.





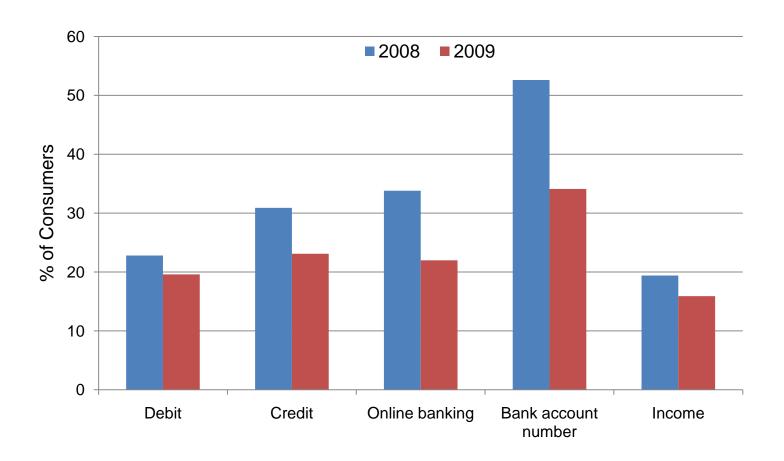
Payment Use (2009)

Cards and paper instruments dominate consumer payments





Automatic Bill Payment: Incidence of Use

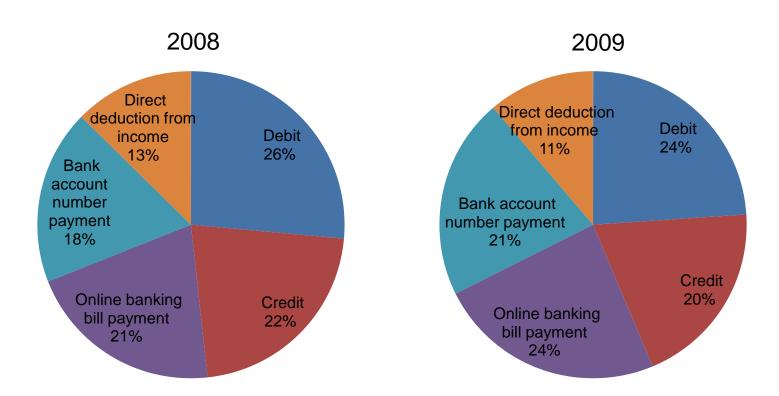


SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision. See 2009 SCPC Table 17.





Automatic Bill Payment: Shares



SOURCE: 2009 Survey of Consumer Payment Choice statistics subject to revision. See 2009 SCPC Table 23





Cash Management

Consumer holdings and withdrawals of cash increased in 2009

		Curr	ent Cash Hold	dings	Typical Cash Withdrawals*			
Measure	Year	Total (\$)	On Person (\$)	Other (\$)	Monthly Amount (\$)	Typical Amount (\$)	Monthly Frequency (#)	
Maga	2009	291	69	229	434	119	5.1	
Mean	2008	230	79	157	336	102	4.3	
Madian	2009	78	34	19	217	60	3.9	
Median	2008	69	28	14	179	50	2.9	

^{*} NOTE: Monthly amount does not equal typical times frequency because the amount and frequency are negatively correlated across consumers.

SOURCE: 2008-2009 Survey of Consumer Payment Choice





- Payments landscape
- Survey of Consumer Payment Choice overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans

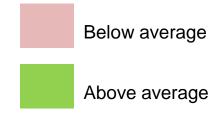




Payment Characteristics: Cash

Consumers consider characteristics when choosing payment instruments

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

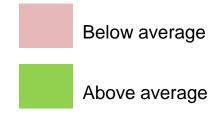
NOTE: Ratings are on a 5-point scale (1 is lowest, 5 is highest)





Payment Characteristics: ACH

2009	Acceptance for payment	Security	Cost	Convenience	AVG
BANP	2.5	2.4	3.7	3.0	2.9
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
BANP	3.2	3.3	3.7	3.6	3.9	3.6	3.8	3.4	3.6
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)





Change in Check Use (2003 – 2006)

Changes in cost and convenience <u>partly</u> explain check decline

Simulation	Estimated change in check share	Percent of actual change in check share
Actual change: 31% to 23%	-0.084	100
More payment instruments (by 0.25 per consumer)	-0.021	25
Lower convenience of checks (by 30 percent)	-0.029	34
Higher cost of checks (by 30 percent)	-0.009	11

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)





- Payments landscape
- Survey of Consumer Payment Choice overview
- Adoption (holding) of payment instruments
- Use of payment instruments
- Consumer perceptions of payments
- Other surveys and future plans





SCPC vs McKinsey CFLS

Overall, broadly similar

- Self-reported consumer responses
- Internet based survey instrument
- Sample coverage good but not perfect
- Obtain adoption and use of payment instruments, practices

Notable differences

- SCPC annual (Q4); McKinsey 3-4x per year
- CFLS lower adoption and use of newer, electronic, high-tech payments
- SCPC measures consumers, CFLS measures households
- Different time periods used in questions





SCPC vs McKinsey CFLS

Number of payments per month

- SCPC has higher bill estimates (18.0 versus 11.5 per month)
 - McKinsey households, SCPC consumers
 - McKinsey <u>recurring</u> bills only, SCPC all bills
 - McKinsey listed specific types of bills, SCPC all bills by payment instruments
- SCPC and CFLS should have similar POS and P2P estimates (TBD)
 - Both are consumer level, but don't have CFLS yet

Accounts and payment instruments

- SCPC surveys all bank accounts
 - McKinsey tracks payments from primary checking account only
- SCPC has unique definitions/terminology for electronic instruments
 - SCPC is unique in its use of Bank Account Number Payment (BANP)





Future Plans

New in 2010:

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

Date	Projects
2010:Q4	Implemented 2010 SCPC and DCPC
2011:Q1	 Publish 2009 SCPC tables Publish SCPC overview paper Release 2009 SCPC micro data
2011:Q2	Board of Advisors meeting
2011:Q3	Publish 2010 SCPC tablesPublish 2010 DCPC tables
2011:Q4	 Implement 2011 SCPC and DCPC Release 2010 micro data



Questions?

Consumer Payments Research Center (CPRC) website:

http://www.bostonfed.org/economic/cprc/index.htm

• Survey of Consumer Payment Choice (SCPC) website:

http://www.bostonfed.org/economic/cprc/scpc/index.htm



