2015 Survey of Consumer Payment Choice Data User's Guide

1 Introduction

One of the major goals of the Survey of Consumer Payment Choice (SCPC) is to provide publicly available, consumer-level longitudinal data to support research on consumer payments and to provide aggregate data on trends in U.S. consumer payments.

The questionnaires and public datasets for the 2015 SCPC are available for download on the Boston Fed's Consumer Payments Research Center (CPRC) website[1]. The data are provided in Stata, SAS, and CSV formats. The CPRC assumes that data users are familiar with a statistical analysis software package such as Stata, SAS, or R. The CPRC does not provide any software assistance.

This document is a data user's guide for the SCPC survey data. Anyone interested in conducting research based on SCPC data will find it helpful to become familiar with this document. See the *2015 Survey of Consumer Payment Choice: Technical Appendix* for details on questionnaire changes, data collection, sampling methodology, and hypothesis test results.

A broad overview of the 2015 SCPC, including a summary of the survey and tables of survey results, can be found in the *The 2015 Survey of Consumer Payment Choice* results paper on the CPRC website.

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

2 SCPC variable overview

There are three broad categories of SCPC variables. Below we provide general information about each.

UAS My Household Questionnaire variables represent a small fraction of variables that come from the UAS My Household survey (MH). The MH survey is used to gather demographic data about each respondent. UAS members take the MH survey quarterly, and their most recent responses to the MH survey are included in these SCPC datasets. Visit the UAS website for more information about the UAS MH survey[2].

Survey variables are the actual results from the SCPC survey questions. Survey variables have variable names such as pa001_a or pu004_b. To see the exact question text, respondent instructions, response option wording, and structure of the questions on the screen, it is recommended to search the survey questionnaires themselves. The questionnaires are available on the CPRC website[3]. Two important considerations of the survey variables are:

- *Randomization of response option orders*: To avoid potential biases arising from the order of response options presented to respondents, the survey instrument randomizes response options for some questions. The questionnaire clearly indicates if response options were randomized. The unrandomized variables have the same variable names as the original survey variables. The raw data from the unrandomized variables and the SAS macros that unrandomize the responses will be made available upon request.

- *Responses for different time frequencies*: Respondents are given the option of reporting payment use and cash management in terms of a typical week, month, or year. This dataset includes variables where responses have been standardized to a monthly frequency, and another variable with the suffix `_wmy_type` which tells the data user if the original response was in a weekly, monthly or yearly frequency. These created, "frequency converted" variables have the same name as the original responses, but without a numeric suffix. For instance, the variable pu006a_a refers to the number of cash payments for retail goods in a typical month, after frequency conversion. The set of three original variables that produce pu006a_a are pu006a_a1 (respondent used the weekly box to report these transactions), pu006a_a2 (monthly) and pu006a_a3 (yearly). Finally, a character variable called `pu006a_a_wmy_type` has a value of "weekly", "monthly", or "yearly" depending on how the respondent initially

[2] https://uasdata.usc.edu/content/My-Household
[3] http://www.bostonfed.org/economic/cprc/scpc/index.htm

answered the question. The SAS macros for the frequency conversions can be made available upon request. The CPRC recommends that data analysts use the created frequency converted variables in their analysis and research.

Created variables are created by the CPRC to populate the SCPC results tables and to aid in data analysis. Most of these variables have descriptive names based on a combination of mnemonics. For example, the variable cc_typ consists of two mnemonics: cc stands for "credit card", and typ stands for "number of transactions in a typical month". More insight into variable name mnemonics is provided in Section 2.2.

2.1 Survey variables

2.1.1 Respondent identifier

prim_key	Unique respondent identifier

The variable `prim_key` is a 9 digit character variable of the form yymmxxxxx, where yy is the two-digit year (14 for 2014, 15 for 2015, etc.), mm is month (01 for January, 02 for February, etc.), and xxxxx is a random five digit number. The `prim_key` for a UAS member is the same across all UAS surveys. This allows data users to merge other UAS survey datasets onto the SCPC dataset.

This variable is the equivalent of the variable `uasid` in other UAS surveys. The name `prim_key` is used to maintain backwards compatibility with the code used to process the SCPC data. For more information about `uasid`, visit https://uasdata.usc.edu/content/Standard-variables. The variable `uasid` and other variables described on the UAS website allow the data user to determine if other members of the same household are UAS members.

2.1.2 Survey weight

r_weight	Individual-level post-stratification weights - from a raking procedure

For information about how the survey weights are calculated, please see the 2015 SCPC Technical Appendix.

2.2 Created variables

Most created variable names are a combination of 2 or more mnemonics, combined using underscores. Typically, the first mnemonic refers to payment instrument, type of account, or a method of payment. The second or last mnemonic often indicates the concept being communicated, such as its characteristic, adoption, or typical use. This section describes the most common mnemonics.

2.2.1 Payment instruments

csh	Cash
chk	Check
chk1, chkacnt1	Primary checking account
chk2, chkacnt2	Secondary checking account
chkacntboth	Both primary and secondary checking accounts
dc	Debit card
cc	Credit card
svc	Stored-value card/prepaid card
banp	Bank account number payment
obbp	Online banking bill payment
mon	Money order
tc	Travelers check
income	Direct deduction from income (used in automatic bill payments only)

Payment instruments are grouped as follows:

paper	Cash, check, money order, travelers checks
card	Credit cards, debit cards, prepaid cards
elect	Bank account number payments, online banking bill payments
pi	All payment instruments

2.2.2 Transaction types

abp	Automatic bill payment
obp	Online bill payment
ipbp	In-person bill payment (or via mail)
op	Online (non-bill) payments
rp	Retail payments (made in-person)
serv	Services and other payments (in-person)
p2p	Person-to-person payment

Transaction types are grouped as follows:

bp	Bill payment i.e. sum of abp, obp, ipbp
op	Online (non-bill) payments
posp2p	All in-person (non-bill) payments, i.e. sum of rp, serv and p2p

2.2.3 Assessment of payment characteristics

security	Security
setup	Getting and setting up
acceptance	Acceptance for payment
cost	Cost
records	Payment records
convenience	Convenience

2.2.4 Payment adoption

adopt	Respondent is currently an adopter (Y/N)
ever	Respondent was an adopter in the past but does not currently have or own the item in question (Y/N)
discard	Respondent was an adopter, not anymore (Y/N)
num	Number of payment instruments (equals 0 for non-adopters)

2.2.5 Payment use

For each payment instrument and seven transaction types, respondents are asked to report their payment use behavior - how frequently they use a payment instrument for a specific transaction type. Therefore, at the most disaggregated level, a payment use variable name consists of three mnemonic components: the payment instrument (Section 2.2.1), followed by the transaction type (Section 2.2.2), and ending with a suffix that indicates the type of payment use information (incidence of use, frequency of use, and share of all transactions made):

typ	Number of transactions in a typical month
t_m	Respondent makes the corresponding type of payment at least once in a typical month (Y/N)
t_y	Respondent makes the corresponding type of payment at least once in a typical year (Y/N)
sh	Number of transactions in a typical month, as proportion of all payments

It is important to note that not all combinations of payment instruments and transaction types exist. This is because they were assumed not to be possible at the time of the survey. The following table illustrates combinations that do exist in the data and the corresponding combinations of mnemonic prefixes:

	bp			op	posp2p		
	abp	obp	ipbp	op	rp	serv	p2p
csh			csh_ipbp		csh_rp	csh_serv	csh_p2p
chk			chk_ipbp	chk_op	chk_rp	chk_serv	chk_p2p
mon			mon_ipbp	mon_op	mon_rp	mon_serv	mon_p2p
tc	tc_ (not asked by transaction type)						
dc	dc_abp	dc_obp	dc_ipbp	dc_op	dc_rp	dc_serv	dc_p2p
cc	cc_abp	cc_obp	cc_ipbp	cc_op	cc_rp	cc_serv	cc_p2p
svc			svc_ipbp	svc_op	svc_rp	svc_serv	
obbp	obbp_abp	obbp_obp					obbp_p2p
banp	banp_abp	banp_obp		banp_op			banp_p2p
income	income_abp						

The variable tot_pay_typ is defined for each respondent as the sum of all payments made in a

typical month. The share variables "_sh" express the original "typ" variable as a proportion of tot_pay_typ for that respondent. The tables in the 2013 SCPC results paper describing payment shares are not computed using these individually defined variables. Instead, each share denotes the total number of transactions falling under that category as a proportion of all reported transactions, aggregated over all respondents. This differs slightly from taking means of the _sh variables defined in this document: it weights respondents who have a large number of transactions more heavily than respondents who have a smaller number of transactions.

2.2.6 Variables defined conditional on adoption

Some tables in the 2013 SCPC results paper include statistics that are calculated conditional on the adoption of a bank account, a certain payment instrument, or other payment technology. Separate variables were created to facilitate this calculation for the tables; these variables either end with the suffix "_adoptonly" or contain the term "oadopt", indicating the conditional coding of the underlying variable. Such variables contain missing values (rather than zeros) for non-adopters of the respective account/instrument/technology.

2.2.7 Flags for variables that were cleaned for outliers

The SCPC has many continuous variables. These variables come from survey questions where the respondent is allowed to enter a number into a box. For instance, we ask the respondent to tell us how many credit card payments they make for retail goods in a typical week, month, or year. Continuous variables in the SCPC are cleaned for outliers and edited based on algorithms described in the 2013 SCPC Technical Appendix. To indicate an edited variable, the prefix "f_" is added to the front of a variable name. A flag value of 0 indicates that the particular observation was not edited. A flag value greater than 0 means the observation was edited.

2.2.8 Excluding large value holdings

For many variables that describe dollar amounts of cash, an additional variable is created with the suffix "_p98". The suffix indicates that the dollar values above the 98th percentile have been set to "missing".

2.2.9 All consumers

The suffix "`_allcons`" stands for "all consumers". Variables with this suffix represent all consumers, not just adopters, for the concept indicated by the variable name.