

Emerging Payments Industry Briefing

An Informative Guide to Consumer Payment Behavior

Who's Who in Consumer Payments Research?

An Overview of Industry Payments Research Companies

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Introduction

The Emerging Payments Research Group (EPRG) of the Federal Reserve Bank of Boston focuses on understanding the impact of demand-side (i.e., consumer) behavior in the payments system for both traditional (i.e., cash, check, ACH, credit/debit) and emerging payment types. The EPRG not only performs research and analysis, but also provides a forum for information exchange, education, and dialogue on emerging issues in payments from the consumer's perspective.

In support of this mission, the EPRG assessed the availability of research and data on consumer payment behavior and compiled a summary of its findings. The project's three key objectives were to determine: (1) what information or research studies existed on consumer behavior and payment choice; (2) the type(s) of research information available; and (3) whether such research was publicly available.

The *Consumer Payments Research Industry Reference Guide* (the Guide) summarizes the information that the EPRG discovered on private-sector companies¹ that conduct research and/or studies related to consumer payments. The current Guide offers information on 57 companies² involved in this type of research. For each organization, the Guide provides contact information; a brief company overview; a description of the research conducted; and, if available, a list of related research papers or studies along with an example of a research study.

The Guide, available at <<http://www.bos.frb.org/economic/eprg/resources.htm>>, is intended to be a useful reference tool for parties interested in learning about research on consumer payment behavior.³ The EPRG periodically updates the Guide, and is now preparing a supplement that will follow the same basic format as the current Guide.⁴ Focused more on organizations with a public policy perspective rather than a market perspective, the supplement will contain information on companies that collect data or conduct research on consumer payments, or that have the potential to do so. Such organizations may include academic research

¹ "Companies", "firms", and "organizations" are used interchangeably throughout this document.

² All numbers in this document are based on the March 2007 version of the Guide.

³ The *Consumer Payments Research Industry Reference Guide* is provided for informational purposes only. It is not the EPRG's intent to endorse any specific organization or research effort.

⁴ The Guide supplement will be available in 4Q07.

centers, government agencies, other nonprofit organizations, as well as scientific research companies.

Consumers Transforming U.S. Payments Landscape

Consumers are central participants in the economy – nearly two-thirds of the U.S. GDP is consumption, which involves consumer payment transactions.⁵ According to the Federal Reserve System (FRS) Depository Financial Institution (DFI) Check Study, in 2001 consumers wrote 21.6 billion checks, or 50.9 percent of all checks.⁶

Nationwide, consumers are changing the way they make payments, while merchants are changing the way they accept payments. The Federal Reserve's 2001 and 2004 payments studies captured the dramatic shift in payments away from checks and toward electronic payments, including credit cards, debit cards, ACH transactions, and Internet/online payments. According to the research published in 2001, the number of checks paid exceeded the number of electronic transactions, 41.9 billion to 30.6 billion; by 2004, the number of electronic transactions exceeded checks paid, 44.5 billion to 36.7 billion. Over the period 2001 to 2004, these changes represent a 4.3 percent annual decline in checks paid, and a 13.3 percent annual increase in electronic transactions. The Federal Reserve is conducting another round of studies in 2007 to determine the current composition of the nation's retail payments market. These new studies will build on the information gained from the 2001 and 2004 studies,⁷ with the 2007 results expected to show continuing migration away from checks to electronic transactions.

While the way in which consumers pay for goods and services is changing dramatically, little information and analyses are publicly available on consumer payment behavior – in particular, why consumers choose one payment method over another. Consequently, there is limited understanding in regard to the demand side of payments.⁸ Research for the Guide as well as feedback from participants at the EPRG's 2005 and 2006 Consumer Behavior and Payment Choice conferences support this finding.^{9 10} Although private companies have collected and studied a great deal of data on consumer payment behavior, much of this research is not publicly available because the results are proprietary.

Companies Conducting Consumer Payments Research

Initially, the EPRG used Internet searches, word-of-mouth references, and information from conferences and other miscellaneous sources to identify private-sector companies that conduct research on consumer payment behavior. To collect more detailed information on companies' consumer payment-related research studies, the EPRG also conducted telephone interviews with about 60 percent of the firms listed in the Guide.

⁵ Schreft, Stacey L., *How and Why Do Consumers Choose Their Payment Methods?*, Federal Reserve Bank of Kansas City, Research Working Paper No. 06-4, April 2006.

⁶ *The 2001 Federal Reserve System Retail Payments Research Project: A Snapshot of the U.S. Payments Landscape*, <http://www.frbsecurities.org/Retail/pdf/RetailPaymentsResearchProject.pdf>.

⁷ "Federal Reserve Banks Announce New Studies to Examine Nation's Check and Electronic Payments Usage," Press Release, Federal Reserve System Financial Service Policy Committee, January 16, 2007.

⁸ *The Boston Fed Study of Consumer Behavior and Payment Choice: A Survey of Federal Reserve System Employees*, Public Policy Discussion Paper No. 07-1.

⁹ *Consumer Behavior and Payment Choice: 2005 Conference Summary*, Federal Reserve Bank of Boston Public Policy Discussion Paper No. 06-1.

¹⁰ *Consumer Behavior and Payment Choice: 2006 Conference Summary*, Federal Reserve Bank of Boston Public Policy Discussion Paper No. 07-4.

As illustrated in Table 1, the EPRG grouped the companies into four categories – research/consulting firms, market research firms, payments service providers, and trade associations – which are defined below.

Table 1 – Number and Percentage of Organizations by Category

| Categories* | Number of Organizations | % of Organizations |
|----------------------------|-------------------------|--------------------|
| Research/Consulting Firms | 33 | 58 |
| Market Research Firms | 14 | 25 |
| Payments Service Providers | 4 | 7 |
| Trade Associations | 6 | 10 |
| Total All Organizations | 57 | 100 |

*The categories do not map to the Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) codes.

The *Research/Consulting* category includes roughly 58 percent of the firms in the Guide, and comprises firms of all sizes that conduct primary research related to consumer payments. Primary research generally involves collecting new data in response to an informational need or to solve a research problem. About one-quarter (27%) of the companies in this category – and less than 20 percent of all companies in the Guide – conduct primary research and surveys, either in-house or with a third party, which focus specifically on consumer payment behavior. Nearly half (45%) of the remaining companies in this category conduct research on the broader payments landscape, while 27 percent conduct research on a wide range of industries, including payments.

The *Market Research* group consists of firms that conduct surveys and primary market research related to consumer payments on behalf of other organizations, such as industry trade groups that do not have the resources to do their own research. This category represents about 25 percent of the organizations in the Guide.

The *Payments Service Providers* category includes companies or networks that provide payments services and that publish reports on payments topics. Companies in this category, for example, may provide services to banks and then publish reports that provide information on particular products or customer segments. These organizations may commission market research firms to conduct the surveys and prepare the reports. This category accounts for roughly 7 percent of the total organizations included in the Guide.

The final category, *Trade Associations*, includes professional organizations that represent the interests of the member firms of an industry, and that conduct educational research on payment-related issues that concern the consumer. About 10 percent of the organizations in the Guide comprise this category.

The EPRG's research indicates that, across all four groups of organizations, the studies undertaken on consumer payments tend to be geared toward meeting specific market or client needs. As a result, the data and studies referenced in the Guide generally are not intended to satisfy the needs of broader public consumption, such as public policy formulation and social science research. However, these industry studies and data do provide a great deal of information that usually is not available from other public sources; therefore, they can be helpful for research and public policy.

Types of Consumer Research

The companies included in the Guide provide a range of research services. Table 2 shows the percentage of companies in the Guide that are engaged in different types of research. Because some companies engage in multiple types of research, the sum of the percentages is greater than 100 percent.

Table 2 – Percentage of Organizations Involved in Different Types of Research

| Type of Research | % of Organizations Involved |
|---------------------------|-----------------------------|
| Primary | 95 |
| Secondary | 23 |
| Proprietary or Customized | 47 |
| Syndicated | 40 |

Almost all (roughly 95%) of the companies are involved in *primary research* efforts related to consumer payments. Those companies that designate market research as their primary business may do the research themselves. As noted earlier, other organizations – such as payments service providers or trade associations – that do not perform research as their primary business may hire or collaborate with other companies to do the actual research.

About 23 percent of the companies conduct *secondary research* based on published sources, the Internet, and public and private databases. Secondary research typically involves analyzing information that has already been collected through research projects conducted for a different purpose. Many of the companies that conduct secondary research also conduct primary research.

Much of the private-sector research on consumer payments is *proprietary or customized*. Almost half (47%) of the organizations indicated that at least some of the research they provide is proprietary or customized. This type of research is targeted to specific clients and is paid for by the clients. Because the research is confidential, the clients will decide whether to share the results. Proprietary or customized research, even if it is available to the general public, typically is not free.

Nearly 40 percent of the companies offer some type of *syndicated research* or reports. Syndicated research involves studies in which the sponsoring research company defines the audience to be surveyed, the frequency of the study, and the questions to be asked. The research firm then sells the results to various clients, usually by subscription. Syndicated research is designed to understand market trends, and is often conducted on a national basis.

Several companies offer omnibus surveys. For those seeking information on markets and opinions, omnibus surveys offer a means to get quick, relatively low-cost answers to their questions without financing and organizing a full market or opinion research survey themselves. On a regular basis, the research company conducts a number of interviews with the target group. These interviews combine questions effectively sponsored by clients with standard questions that always include demographic information, such as age, sex, and occupation, or company classification information for a business survey. The answers to these questions are analyzed shortly thereafter, cross-referenced with some or all of the classification data, and then delivered to clients either as tables or in a report.

Some of the primary research studies referenced in the Guide focus on consumer payment preferences and choices, while others center on topics such as identity theft and internet fraud, or on analytical research efforts in specific areas, for example, the unbanked and underbanked populations.

Research Studies and Data Characteristics

The Guide provides examples of research studies related to consumer payments for 57 percent of the organizations listed. Where available, the EPRG included information on the important characteristics of the studies, such as the sample size and population, data collection methods, and survey frequency. Below is a summary of some of the main characteristics found in the survey examples.

■ *Sample Size and Population*

Sample sizes vary. Of those survey examples that include sampling data, almost 60 percent had sample sizes of 2,000 or less; about 20 percent had sample sizes between 2,000 and 5,000; and less than 10 percent had sample sizes above 10,000. A larger sample size does not necessarily guarantee more accurate data. In a properly designed survey, for instance, a sample of 500 should give the same unbiased estimate as a sample of 5,000; however, larger samples should provide more assurance that the estimate reflects the true value of the population being studied.

The survey examples also varied according to how the data were collected. About two-thirds of the survey examples involved collecting data directly from consumers (or end-users); while nearly one-third involved collecting information from key business decision-makers, payments industry contacts, or merchants. Within these broad categories, there is also variation in who is surveyed, as researchers may select populations based on the survey goals or on specific client needs. Sample populations, for instance, might include only credit or debit cardholders, Internet users, or clients or members of a particular organization or industry group.

■ *Data Collection Methods*

Companies performing research on consumer payments use a variety of data collection methods. In some cases, they may use different methods or combinations of methods depending on the specific research being conducted, client requirements, advantages and disadvantages of specific survey methods when surveying certain populations (e.g., people without computers cannot participate in online surveys), and the costs to administer various types of surveys.

Of those companies that include survey examples with information regarding the methodology, about 80 percent used only one data collection method for their study.

Table 3 shows the primary data collection methods used in the survey examples and the percentage of organizations that use each method in general, whether or not they have examples in the Guide. Other data collection methods mentioned in the Guide include focus groups and diaries.

Table 3 – Data Collection Methods Used by Organizations

| Data Collection Methods | % of Survey Examples | % of Organizations |
|---|----------------------|--------------------|
| Telephone (with or without CATI) ¹¹ | 30 | 32 |
| Online | 24 | 46 |
| Mail (paper) | 18 | 24 |
| Interview (in-person or by telephone) ¹² | 21 | 40 |

■ Survey Frequency

Nearly 60 percent of the survey examples appear to be one-time efforts, while about 35 percent are annual studies that provide some trend information over time. For some annual studies, the number of years the study had been conducted was not available; for annual studies with information about sample periods, the number ranged from just a few years to more than 15 years. The remaining survey examples include quarterly, biennial, or repetitive efforts conducted less regularly.

Market Research Panels

Some of the research and consulting firms, payments service providers, and trade associations in the Guide use market research companies to conduct surveys.

These market research firms recruit large numbers of geographically and demographically diverse respondents who voluntarily choose to take surveys on a variety of topics. The firms have very large databases containing information about respondents, from which they develop custom panels comprised of respondents with common interests or characteristics. Custom panels may group respondents by their age, ethnicity, Internet use, or whether they are banked or unbanked, or by another category, thereby enabling clients to focus their surveys on particular population segments. In the private sector, for example, research using custom survey panels could help financial institutions market or sell products or services to specific customer segments; in the public sector, the use of custom panels could provide a better sense of how different consumer groups behave. Some panels are proprietary, created and managed on behalf of individual clients.

About 12 percent of the organizations, primarily those identified in the *market research* section of the Guide, indicated that they had large panels from which to draw survey respondents. The size of the panel databases ranged from one million to 10 million respondents. One company indicated that it utilizes an online community of 60 million consumers for its market research. About half of the organizations with large panel databases ask specific questions about consumer payments, while the remaining companies tend to conduct broader research on payments or consumer purchases. Four organizations in the Guide provided survey examples that use panels provided by these market research firms.

¹¹ CATI is Computer Assisted Telephone Interviewing.

¹² There may be some overlap between the information in the telephone and interview categories as this information was not always easily accessible. When the data collection method was clearly identified as telephone, it was counted in the telephone category. If the data collection method was reported as interview, it was counted in the interview category; however, it could have been conducted either by telephone or in person.

Conclusion

As noted earlier in this paper, the *Consumer Payments Research Industry Reference Guide* is intended to be a useful reference tool for parties primarily interested in learning about research being conducted on consumer payment behavior by firms in the payments industry.

At the EPRG's July 2006 *Conference on Consumer Behavior and Payment Choice*, during a panel discussion about the existence of consumer payment data, many panelists and participants stressed the difficulty and costliness of doing "good" surveys to collect data on consumer payment behavior. The panelists and conference participants generally agreed that a "good" survey should include:

- Random sampling that is truly representative of the entire population
- Wide-ranging data on:
 - consumer income, consumption, savings, wealth and other financial traits
 - payment methods, dollar value, number of transactions, and venues
 - actual consumer actions rather than on self-reported actions
- High-frequency data over a continuous period of time on the same consumers (longitudinal panels)¹³

Since individual organizations have different goals and motivations for studying consumer payment behavior, they utilize a variety of approaches when conducting research. Readers will need to do their own research regarding the statistical sufficiency of the data and reports referenced in the Guide. When determining what data to use or what conclusions to draw, they may want to consider the elements listed above as part of their evaluation process.

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The views expressed in this paper are those of the authors and do not necessarily reflect those of the Federal Reserve Bank of Boston or the Federal Reserve System.

This paper is available at the Federal Reserve Bank of Boston website <http://www.bos.frb.org/economic/eprg/papers/index.htm>.

¹³ *Consumer Behavior and Payment Choice: 2006 Conference Summary*, Federal Reserve Bank of Boston Public Policy Discussion Paper No. 07-4.

The Emerging Payments Research Group is a multidisciplinary team of senior payments professionals and economists, both full-time and part-time, who work together to research, understand, and educate key stakeholders on consumer payment behaviors and their impacts on the payment system.

The team conducts quantitative and qualitative research and analysis of consumer payment behavior data and related risks, based on conference findings, literature research, survey data, and developing partnerships with private and academic sectors. The EPRG also keeps abreast of trends in the emerging payments space.

The mission of the EPRG is to perform research and analysis and to provide a forum for information exchange, education, and dialogue on emerging issues in payments from the consumer perspective, emphasizing cross-functional collaboration and building broader expertise in consumer payments.

The EPRG's website is <http://www.bos.frb.org/economic/eprg>.

