



# Consumer Behavior and Payment Choice

## Second Annual Research Conference

July 25–27, 2006

Federal Reserve Bank of Boston

### Introduction

Tuesday, July 25, will be a full-day academic workshop dedicated exclusively to research paper presentations. The conference on Wednesday and Thursday, July 26 and 27, will include a combination of industry and academic research presentations and panel discussions.

## Academic Workshop

### Tuesday, July 25

*All conference participants are welcome to attend the academic workshop; please note it will be dedicated exclusively to research paper presentations.*

**Academic workshop sessions will be held in Audiovisual Room 1 (AV-1) unless otherwise noted.**

8:00 a.m.     *Workshop Registration and Breakfast - Audiovisual Lounge*

9:00 a.m.     **Workshop Introduction**

**Jeffrey Fuhrer**  
Executive Vice President and Director of Research  
Federal Reserve Bank of Boston

9:15 a.m.     **Credit Card Competition and Naïve Hyperbolic Consumers**  
*by Elif Incekara*

This paper shows that consumers may be unresponsive to interest-rate and credit limits in credit card offers because of a combination of the consumer's timing inconsistency, credit card companies' grace period offer, and one period lag in using a new card. The author demonstrates that there are circumstances in which zero and positive expected profits would be possible.

Presenter:     **Elif Incekara**  
PhD Candidate  
Pennsylvania State University

Discussant: **Jeremy Tobacman**  
PhD Candidate  
Harvard University

10:30 a.m. *Break - Audiovisual Lounge*

10:45 a.m. **Price Discrimination with Experience Goods: Sorting-Induced Bias and Illusive Surplus**  
*by Ronald Goettler and Karen Clay*

Firms often offer menus of two-part tariffs to price discriminate among consumers with heterogeneous preferences. This paper studies the effectiveness of this screening mechanism when consumers are uncertain about the quality of the good and resolve this uncertainty through consumption experiences. The analysis highlights four elements that influence consumer behavior and affect pricing strategies: beliefs, switching costs, experiential learning, and mistakes on tariff choice.

Presenter: **Ronald Goettler**  
Associate Professor of Economics  
Carnegie Mellon University

Discussant: **Dirk Bergemann**  
Professor of Economics  
Yale University

12:00 p.m. *Lunch – New England Room*

1:00 p.m. **Determinants of Borrowing Limits on Credit Cards**  
*by Shubhasis Dey and Gene Mummy*

The fact that the actual amounts borrowed on credit cards may differ from their approved borrowing limits generates a new source of information asymmetry between borrowers and lenders in this market. The paper proposes a contracting scheme that will help reduce this misallocation problem. Moreover, it explains how new information on borrowing patterns will generate revisions of existing contracts and counteroffers (such as balance transfer offers) from competing banks.

Presenter: **Shubhasis Dey**  
Senior Analyst  
Bank of Canada

Discussant: **Paul Willen**  
Senior Economist  
Federal Reserve Bank of Boston

2:15 p.m. **Piecing Together a Portfolio Puzzle: Accounting for Why Households Borrow High and Lend Low**  
*by Jonathan Zinman*

Many consumers seem to be simultaneously borrowing high and lending low (BHLL). In particular, the mean U.S. household with a credit card fails to use highly liquid assets to pay down credit card debt. The paper examines how BHLL is defined and measured. The author further suggests that most BHLL is a mirage created by measuring “arbitrage” opportunities with respect to pecuniary asset yields rather than the true value of liquidity.

Presenter: **Jonathan Zinman**  
Assistant Professor  
Department of Economics  
Dartmouth College

Discussant: **Annamaria Lusardi**  
Associate Professor  
Department of Economics  
Dartmouth College

3:30 p.m. *Break - Audiovisual Lounge*

3:45p.m. **Multihoming in the Market for Payment Media: Evidence from Young Finnish Consumers**  
*by Ari Hyytinen and Tuomas Takalo*

In the market for payment media, some consumers use only one medium when paying for their point-of-sale transaction, while others multihome and use many. In this paper the authors look at determinants of the adoption of new payment media through the window of multihoming. Using data on young Finnish consumers, the results suggest that increasing consumer awareness could significantly speed up the adoption of new means of payment.

Presenter: **Tuomas Takalo**  
Research Supervisor  
Bank of Finland

Discussant: **Oz Shy**  
Professor  
WZB Research – Social Science Research Center, Berlin  
and  
University of Haifa, Israel

5:00 p.m. *Welcome Reception – Economic Adventure*



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Building on the Bank's inaugural effort to understand the demand, or consumer, side of the retail payments market, this portion of the conference brings together academic and private sector researchers and payments system participants to further explore consumer payment issues. Both academic and industry research will be presented on topics including data collection, emerging payment technologies, and public policy.

### Conference Wednesday, July 26

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**Conference sessions will be held in Audiovisual Room 1 (AV-1) unless otherwise noted.**

7:30 a.m. *Conference Registration and Breakfast – Audiovisual Lounge*

8:30 a.m. **Welcome**

**Jeffrey Fuhrer**

Executive Vice President and Director of Research  
Federal Reserve Bank of Boston

8:45 a.m. **Consumers' Use of Debit Cards: Patterns, Preferences and Price Response**

*by Ron Borzekowski, Elizabeth Kiser, and Shaista Ahmed*

Dramatic changes have occurred in the U.S. payment system over the past two decades, most notably an explosion in electronic card-based payments. Using a new nationally representative consumer survey, the paper describes the current use of debit cards by U.S. consumers, including how demographics affect use, reasons for using debit cards, and substitutes between debit and other payment instruments. The authors also examine the relationship between household financial conditions and payment choice, and they analyze the price sensitivity of card use.

Presenter: **Elizabeth Kiser**  
Economist  
Board of Governors of the Federal Reserve System

Discussants: **Genie Driskill**  
COO and Senior Vice President – Research  
Synergistics Research Corporation

**Robert Hunt**  
Senior Economist  
Federal Reserve Bank of Philadelphia

9:45 a.m. **Visa Payment Panel Study**  
*by Visa USA Research Services*

Consumers make billions of payment decisions every year. They have many additional choices today that were not available 50 years ago. The paper provides an overview of Visa's Payment Panel Study, including a history of the Panel and a brief review of the methodology, sampling structure, and data gathering process. The results of this effort to better understand consumer spending behavior show how payment method preferences have changed over time.

Presenter: **Tracy Hampton**  
Senior Vice President, Research Services  
Visa USA

Discussants: **Ariana-Michele Moore**  
Senior Analyst  
Celent

**Jonathan Zinman**  
Assistant Professor  
Department of Economics  
Dartmouth College

10:45 a.m. *Break - Audiovisual Lounge*

11:00 a.m. **U.S. Consumer Payment Data: What Information Exists and What Is Needed?**

The purpose of this two-part presentation is to take stock of existing consumer payments data, voice the need for additional data, and evaluate the pros and cons, and costs and benefits, of efforts to collect and disseminate a broader range of national, publicly available data on consumer payments. The session will be divided into two panels, Panel A and Panel B. The goal will be to initiate a dialogue about the need to develop a framework and roadmap for a national agenda to collect more and better consumer payments data.

**Panel A: What Consumer Payment Data Exist?**

This session will focus on what data exist. It will include participants from the banking industry, non-bank payments industry, and Federal Reserve who will describe their data, why they collect it, and how they use it.

Moderator: **Lucia Dunn**  
Professor of Economics  
Ohio State University

Panelists: **Robert Avery**  
Senior Economist  
Board of Governors of the Federal Reserve System

**Ashley Lyons**  
Manager of Market Intelligence and Alliance  
United State Postal Service

**Deborah Patrick**  
Group Account Director  
TNS – Financial Service Group

**David Stewart**  
Senior Vice President, Research  
Global Concepts

**Lisa Tidwell**  
Director of Market Intelligence, First Data Debit Services  
First Data Corporation

**Margaret Morgan Weichert**  
Senior Vice President, Payments Strategy  
Bank of America

**Jane Yao**  
Managing Director, Benchmarking and Survey Research  
American Bankers Association

### **General Discussion**

12:30 p.m. *Lunch – Harborview Dining Room*

1:45 p.m. **Panel B: What Consumer Payment Data Are Needed?**

This session will focus on what data are needed. It will include participants from the academic world, consumer advocacy groups, and public policy makers who will explain why the existing data are not sufficient for their needs and what additional data they would like to have made available from existing sources or collected in new efforts.

Moderator: **Scott Schuh**  
Senior Economist and Policy Advisor  
Federal Reserve Bank of Boston

Panelists: **Patricia Allouise**  
Assistant Vice President and Assistant General Counsel  
Federal Reserve Bank of Boston

**Sharon Hermanson**  
Senior Policy Advisor  
Public Policy Institute – AARP

**Ronda Kent**  
Senior Attorney  
Financial Management Service  
U.S. Department of the Treasury

**Jeffrey Marquardt**  
Deputy Director  
Division of Reserve Bank Operations and Payment Systems  
Board of Governors of the Federal Reserve System

**Martha Starr**  
Professor of Economics  
American University

### **General Discussion**

3:00 p.m. *Break – Audiovisual Lounge*

3:15 p.m. **Cash, Check or Bank Card? The Effects of Transaction Characteristics on the Use of Payment Instruments**  
*by David Bounie and Abel Francois*

This session will summarize the results of a 2005 survey of French consumer payment practices using a unique and original dataset. The survey focused on payment methods at the point of sale: cash, check, or bank card. The paper relates transaction size, type of good and spending place, and a double supply-side effect to assess the role of transaction characteristics in the use of payment instruments.

Presenter: **David Bounie**  
Assistant Professor in Economics  
Telecom Paris

Discussants: **Elizabeth Klee**  
Economist  
Board of Governors of the Federal Reserve System

**Aaron McPherson**  
Research Director, Payments  
Financial Insights/IDC

4:15 p.m. **Interactive Survey**

5:00 p.m. *Reception – Roof Garden Terrace*

## Conference

### Thursday, July 27

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7:30 a.m. *Breakfast - Audiovisual Lounge*

8:30 a.m. **Consumer Payment Choice**  
*by Janusz Ordoover and Margaret Guerin-Calvert*

This session will examine changes in consumers' choice of payment instruments in the United States, with a particular focus on the expansion of electronic payments into new channels. The authors assess the interrelationship among consumers' choice of payment mechanism, interchange fees, and effects on retail pricing by putting them into the appropriate two-sided network context. Policy implications of the findings for assessment of both regulatory and enforcement policy are also addressed.

Presenter: **Margaret Guerin-Calvert**  
President and Managing Director  
Competition Policy Associates, Inc.

Discussants: **Sujit "Bob" Chakravorti**  
Senior Economist  
Federal Reserve Bank of Chicago

**Steve Mott**  
Chief Executive Officer  
BetterBuyDesign

9:30 a.m. **Loyalty and Consumer Choice Panel**

Economists view reward programs for credit and debit users as a price discount afforded the users. To the payments industry, reward programs are a key to building and retaining loyal consumers. This panel seeks to understand how consumers respond to payment method incentives and whether rewards and loyalty are optimal for society. Do "rewards" ultimately tax the merchant and in turn the user with higher prices? Alternatively, could merchants and consumers benefit from an expansion of the current loyalty programs so that marketing could be targeted more directly to consumers?

Moderator: **Tony Hayes**  
Vice President, Strategy and Organization Effectiveness  
Dove Consulting

Panelists: **Tim Attinger**  
Senior Vice President, Product Innovation and Development  
Visa USA

**Fumiko Hayashi**  
Senior Economist  
Federal Reserve Bank of Kansas City



**William Koleszar**

Senior Vice President, New Product Development and Emerging Opportunities  
Citizens Financial Group

**Jonathan Silver**

President and CEO  
Affinity Solutions

**General Discussion**

11:00 a.m. *Break - Audiovisual Lounge*

11:15 a.m. **Payment Instruments as Perceived by Consumers – A Public Survey**  
by *Nicole Jonker*

Survey results show that Dutch consumers perceive paying in cash as an inexpensive way to pay, while they regard electronic payment cards as relatively expensive. The survey also highlights several non-price features that contribute to the unpopularity of electronic payment cards in the Netherlands.

Presenter: **Nicole Jonker**  
Economist  
De Nederlandsche Bank

Discussants: **Jeffrey Dominitz**  
Senior Economist  
RAND Corporation  
and Associate Professor  
Heinz School of Public Policy and Management  
Carnegie Mellon University

**Jed Kolko**  
Research Fellow  
Public Policy Institute of California

12:15 p.m. *Lunch – New England Room*

1:15p.m. **Cash to Electronic Payments Panel**

Is moving away from cash to electronic payments for small-value items in the best interest of, and more efficient for, consumers and society? Many retailers, especially those selling low-value products, see their competitors offer credit and debit at the point of sale and feel pressure to offer electronic options. What are the true costs of cash versus the benefits of cash for low payments? Is the movement toward low-value electronic payments best for consumers and merchants? Is it optimal to have minimal cash usage in businesses?

Moderator: **Michael Kasavana**  
NAMA Professor of Hospitality Business  
Michigan State University

Panelists: **Mark Friedman**  
President and CEO  
Peppercoin

**Gregory Garback**  
Executive Officer, Department of Finance  
Washington Metropolitan Area Transport Authority

**Tim Hammonds**  
President and CEO  
Food Marketing Institute

**Anne Layne-Farrar**  
Principal  
LECG, LLC (Law and Economics Consulting Group)

### General Discussion

2:45 p.m. **Debit vs. Credit: A Study of Self-Control in Shopping Behavior, Theory and Evidence**  
*by Marc Fusaro*

Debit cards are the fastest growing consumer payment method despite being more expensive and less convenient than credit cards. This session presents a search theoretic model that explains how some consumers use debit cards to avoid overspending. A data set of checking account records is used to show some evidence for the theory.

Presenter: **Marc Fusaro**  
Assistant Professor  
Department of Economics  
East Carolina University

Discussants: **Bruce Cundiff**  
Research Analyst  
Javelin Strategy and Research

**Stephan Meier**  
Economist  
Federal Reserve Bank of Boston

3:45 p.m. **Survey Results and Closing Remarks**

**Scott Schuh**  
Senior Economist and Policy Advisor  
Federal Reserve Bank of Boston

4:00 p.m. *Adjournment*