Payments System Research at the Federal Reserve Bank of Kansas City

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Topics

- Overview of Payments System Research (PSR) function
- Summary of specific research interests and projects
Federal Reserve System

- Kansas City is one of twelve regional Reserve Banks in addition to the Board of Governors
- All Reserve Banks and Board of Governors have research departments; not all research departments have payments research groups
- Those that do:
  - Board of Governors (general)
  - New York (wholesale)
  - Boston (consumer preferences)
  - Chicago (emerging payments)
  - Philadelphia (payment cards)
  - Kansas City (retail policy issues)
Organization

- PSR is one of three functions in the Economic Research Department
  - Payments System Research
  - Macroeconomics and Monetary Policy Research
  - Banking and Financial Market Research
- Mission: To conduct policy-oriented research on retail payments issues
- Currently six members: four economists, one industry analyst, one research associate
Activities

- Conduct research on retail payments issues, both domestic and international
- Communicate results of research to central bank, industry, and academic audiences via publications and presentations
- Sponsor conferences: Interchange (2003), Nonbanks (2005)
- Publication outlets
  - Books
  - Articles: FRBKC Economic Review; academic journals; FRBKC Briefing
  - Conference proceedings
  - Working papers
Research Focus

- Research has focused on four broad areas
  - Credit, Debit, and ATM markets
    - Market structure, interchange issues
  - Nonbanks in the Payments System
    - Prevalence, risk issues
  - Emerging Payments
    - Stored-value cards, mobile payments
  - Consumer Preferences
    - Reward programs

- Implications for efficiency, safety, accessibility?
Credit, Debit, and ATM Markets

- The United States has witnessed a striking shift in payments from paper to electronics in recent years.
- Payment cards, in particular, showing strong growth, especially debit cards (both signature and PIN-based).
- Industry has been marked by heavy consolidation of debit networks and controversy over interchange pricing in credit and debit markets.
Credit, Debit, and ATM Markets

Selected Publications

Credit, Debit, and ATM Markets

- Selected findings/observations (U.S.)
  - Divergence in growth patterns
    - ATM industry has matured
    - Credit card industry growing modestly
    - Debit card industry expanding rapidly
  - Debit card industry
    - Strong growth driven by increased consumer acceptance, heightened merchant incentives, heavy promotion
    - Visa's market share of overall debit market now over 60 percent
  - Interchange controversy -- How will it be resolved?
  - Data breaches and fraud on the rise – U.S. as a target?
Nonbanks in the Payments System

- Nonbanks are becoming increasingly prominent in retail payments systems throughout the world.
- Rising nonbank presence particularly evident in the United States:
  - “New” participants: e.g., PayPal, Google
  - “Traditional” participants: e.g., First Data, TSYS
- What roles do nonbanks play in the payments chain?
- Are nonbank participants subject to appropriate supervision?
Nonbanks in the Payments System

Selected Publications

Nonbanks in the Payments System

- Selected findings/observations
  - U.S.
    - Nonbanks are pervasive
    - Nonbank business relationships with other participants are complex and intertwined
    - Nonbanks are rarely directly involved in settlement activities
    - Many, but not all, major nonbanks are supervised
  - U.S. and Europe
    - Nonbank presence in retail payments is substantial and growing
    - The regulatory framework surrounding nonbanks is uneven both within and across countries
    - Nonbanks are currently subject to less oversight than banks
    - In the U.S., there have been significant private-industry efforts to manage risks. In Europe, the Payment Services Directive is intended to harmonize legal frameworks.
Emerging Payments

- As in many other countries, the United States has seen an increase in new types of payments in recent years
  - P2P, e.g., PayPal
  - Conversions, e.g., check to ACH, debit card to ACH
  - Stored-value, e.g. general purpose gift cards, payroll cards
  - Mobile payments and banking
  - Check 21
Emerging Payments

Selected Publications

Emerging Payments

Selected findings/observations (U.S.)

- In many or most cases, “new” payment instruments are new front ends to existing infrastructures
- Market test is challenging
  - Roll-out period is critical; perceived risks can be a significant hurdle
- Emerging payments that have caught on
  - Online bill payment
  - PayPal P2P
  - Stored-value cards (gift cards, payroll cards, health-spending cards)
  - Check conversion to ACH (at point of sale, biller lockbox, merchant back-office, online)
- Emerging payments that have not caught on
  - Bank-offered P2P
  - ACH credit-push payments to online merchants
- Emerging payments perhaps on the cusp
  - Contactless, mobile phone payments
- Nonbanks have often played a critical role as innovators
- Confusion, uncertainty over applicable laws and regulations
With the shift from paper to electronics has come a desire to gain a better understanding of consumer preferences. What attributes are most important to consumers in choosing and using various payment instruments, e.g., convenience, cost, safety? PSR has focused, in particular, on reward programs associated with credit and debit cards.
Selected Publications

Consumer Preferences

- Selected findings/observations (U.S.)
  - Consumer adoption of electronic forms of payments, such as debit cards and electronic bill payment, is correlated with adoption of other new technologies, such as computers.
  - Transaction characteristics, such as the transaction value, the physical characteristics of the point of sale, and a bill's frequency and value variability, affect consumer payment choice.
  - Credit and debit card rewards greatly affect cardholding consumers' payment choice at the point of sale. However, only a small percentage of cardholders would switch from card-based payment methods (credit/debit cards) to paper-based payment methods (cash/checks), even if rewards were no longer offered.
Some Open Research/Policy Issues

- Domestic
  - Appropriate role of Federal Reserve in retail payments
  - Gaps in nonbank regulatory coverage
  - Obstacles to electronification of B2B payments
  - Convergence of small-dollar (ACH) and large-dollar (Fedwire-CHIPS) transactions

- International
  - Regulatory challenges of globalization of payments industry
  - Impact on public confidence of growing data security, fraud incidence
Contact Information

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