South West Regional Symposium

Trends in Payments Systems Mechanisms
March 27, 2008
Terri Bradford
Topics

- Overview of Payments System Research at the Kansas City Fed
- The Changing Payments Landscape
- Credit and Debit Card Payments
- Stored-Value Card Payments
- Automated Clearing House Payments
- Payments on the “Verge”? 
- Resources
Reserve Bank Research

- All reserve banks and the Board of Governors have research departments
- But, not all research departments have payments system research groups
- Those that do are:
  - Board of Governors (general)
  - New York (wholesale)
  - Boston (consumer preferences)
  - Chicago (emerging payments)
  - Philadelphia (payment cards)
  - Kansas City (retail policy issues)
Payments System Research at the Kansas City Fed

- 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 specialist, one research associate
Payments System Research Activities

• Conduct research on retail payments issues, both domestic and international
• Communicate results of research to central banks, industry, and academic audiences via publications and presentations
• Sponsor conferences: Interchange (2003), Nonbanks (2005)
• Publish works
  – Books
  – Articles: FRBKC *Economic Review*, academic journals, FRBKC *Briefing*
  – Conference proceedings
  – Working papers
The Changing Payments Landscape

- Annual Number of Noncash Payments

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2003</th>
<th>CAGR*</th>
<th>2003</th>
<th>2006</th>
<th>CAGR*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total (billions)</strong></td>
<td>72.5</td>
<td>81.4</td>
<td>3.9%</td>
<td>81.4</td>
<td>93.3</td>
<td>4.6%</td>
</tr>
<tr>
<td>Checks (paid)</td>
<td>41.9</td>
<td>37.3</td>
<td>-3.8%</td>
<td>37.3</td>
<td>30.6</td>
<td>-6.4%</td>
</tr>
<tr>
<td>Debit card</td>
<td>8.3</td>
<td>15.6</td>
<td>23.4%</td>
<td>15.6</td>
<td>25.3</td>
<td>17.5%</td>
</tr>
<tr>
<td>Signature</td>
<td>5.3</td>
<td>10.3</td>
<td>24.8%</td>
<td>10.3</td>
<td>16.0</td>
<td>15.8%</td>
</tr>
<tr>
<td>PIN</td>
<td>3.0</td>
<td>5.3</td>
<td>20.9%</td>
<td>5.3</td>
<td>9.4</td>
<td>20.6%</td>
</tr>
<tr>
<td>Credit Card</td>
<td>15.6</td>
<td>19.0</td>
<td>6.8%</td>
<td>19.0</td>
<td>21.7</td>
<td>4.6%</td>
</tr>
<tr>
<td>ACH</td>
<td>6.2</td>
<td>8.8</td>
<td>12.4%</td>
<td>8.8</td>
<td>14.6</td>
<td>18.6%</td>
</tr>
<tr>
<td>EBT</td>
<td>0.5</td>
<td>0.8</td>
<td>17.0%</td>
<td>0.8</td>
<td>1.1</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

* CAGR is the compound annual growth rate.

Distribution of the Number of Noncash Payments

- Comparison of 2003 and 2006

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Distribution of the Number and Value of 2006 Noncash Payments

Number

- Checks (paid): 33%
- EBT: 16%
- ACH: 23%
- Debit card: 27%

Value

- Checks (paid): 55%
- Debit card: 3%
- Credit card: 1%
- EBT: 0%
- ACH: 41%
Credit and Debit Card Payments

• Of all of the electronic payments, credit cards experienced the lowest rate of growth
  – 4.6 percent per year
• For the first time, the number of debit card payments exceeded the number of credit card payments
  – PIN debit use increased 20.6 percent per year
  – Signature debit use increased 15.8 percent per year
Credit and Debit Card Payments

- In 2006, nearly 700* million credit cards were issued
  - Of those, nearly 600 million were Visa or MasterCard branded
- 75 percent of consumers have at least one credit card**
- The average credit card customer has 2-3 Visa or MasterCard branded cards in their wallet*

* Source: Nilson Report
** Source: SCF 2001
Credit and Debit Card Payments
There are essentially two types of cards

- Open-loop cards
  - Carry a network logo
  - Can be used nearly anywhere the network card is accepted

- Closed-loop cards
  - Specific to a store or group of stores
Stored-Value Card Payments

- Stored-value cards are among the most frequently given gifts
- Used for payroll purposes for unbanked
- Can provide an electronic means of payment for those without access to credit or debit cards
- Some offer reload capabilities
- Issues
ACH Payments

• The latest Payments Study revealed that noncash payments made via the ACH grew most significantly from 2003 to 2006
  – 18.6 percent per year

• Included among these types of payments are direct deposit of payroll and benefits; direct, online, and automatic bill payment; and conversion of payments that were initiated via check
ACH Payments

- Conversion of payments that were initiated via check include the following:
  - Checks converted via the Web
  - Checks converted via the phone
  - Checks converted after return for NSF
  - Checks converted in a “back office”
  - Checks mailed/dropped as bill payments
  - Checks converted at the point-of-purchase
Payments on the Verge?

- Decoupled debit card products
  - Mechanism to issue debit cards in a manner similar to credit cards
- Contactless card payments
  - Tap or wave to make purchase
- Mobile Payments
  - Enabling payments via mobile devices using text, wireless, contactless, and/or application download
  - Among the providers are PayPal, MocaPay, and Obopay
Payments on the Verge?

- An example of Mobile payment via text

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Get all you need for fall, using your Verizon Wireless phone: Buy any of the products on this page by sending a text message with the item's code to 467467 (go shop).

- **Test BUTTERFLY to 467467**
- **Test TEASE to 467467**
- **Test 050 to 467467**
- **Test KIPLING to 467467**
- **Test FACETIT to 467467**

### Accessories

- **Jenny Shariff**
  - **Madame Butterfly Necklaces**
  - 14k gold-filled chain and clasp, chestnut color horn heart, brass jacket, brass butterfly, and mother-of-pearl heart.
  - Exclusive price: $96

- **Lucky Face II Combination Package**
  - Includes: 1 oz. organic Fresh Face Cleanser; Herbal Face Toner and the Herbal Face Cream.
  - Exclusive price: $45

- **OSO Dodici Watch**
  - Lucite & steel watch with reversible black & white nylon strap.
  - Exclusive price: $90

- **Face It Combination Package**
  - Includes: 1 oz. organic Fresh Face Cleanser; Herbal Face Toner and the Herbal Face Cream.
  - Exclusive price: $45

### How to phone2own

1. **Text message the product's code to 467467**
2. **Reply: **CALL** to be prompted to make a decision or go back to Step 1 to try another product.
3. **If you reply **CALL**, you will receive instructions on how to complete your order.

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*Standard text messaging rates apply. Price does not include tax and shipping. For more information, visit LuckyLunchbox.com/shoplates.*
Closing Remarks

• Any one of these topics could have taken the entire session to discuss
• Beyond mere discussion of payment types and their uses there are a host of other issues
• All are areas of ongoing interest and focus for our group
Resources

- **Briefing Articles**
  - [https://connect2.federalreserve.org/EconRes/PSR/Briefings/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+PSR-Briefings.htm](https://connect2.federalreserve.org/EconRes/PSR/Briefings/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+PSR-Briefings.htm)

- **Conference Summaries**
  - [https://connect2.federalreserve.org/home/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+subwebnav.cfm?level=3&theID=10276&SubWeb=7](https://connect2.federalreserve.org/home/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+subwebnav.cfm?level=3&theID=10276&SubWeb=7)

- **Working Papers**
  - [https://connect2.federalreserve.org/Econres/PSR/RWP/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+PSR-WorkingPapers.htm](https://connect2.federalreserve.org/Econres/PSR/RWP/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+PSR-WorkingPapers.htm)

- **Books**
  - [https://connect2.federalreserve.org/home/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+subwebnav.cfm?level=3&theID=10130&SubWeb=5](https://connect2.federalreserve.org/home/DanaInfo=.awxyCoftzi1mt5.tttQ6-0+subwebnav.cfm?level=3&theID=10130&SubWeb=5)

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