Mobile Banking and Remittance Innovation

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Federal Reserve Perspective on Mobile Banking and Payments

• Use of mobile phone as channel for banking and payments is beginning to evolve – question of when
• As a central bank the Fed is responsible for ensuring integrity and safety of nation’s payment system
• As the US retail payments system evolves and changes, the Fed needs to be informed and involved to understand impact
• Fed can help to identify potential gaps in regulatory oversight related to consumer security, privacy, and education
Mobile payments and banking – different adoption experiences – different risks

Mobile banking:
- Cell phone used for bill pay, alerts, funds transfers, balance checking
- Faster adoption in developed markets with many existing payment options already

Mobile payments:
- Proximity and remote (P2P) payments
- Faster adoption in emerging markets
- Leapfrogging generations of financial modernization from cash and barter to electronic airtime transfers
- Opportunities for financial inclusion
Banking or paying by mobile introduces new players to retail payment systems

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<th>Traditional Payment System Participants</th>
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<tr>
<td>Financial Institutions</td>
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<tr>
<td>Customers &amp; merchants</td>
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<td>Payment Card Networks</td>
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<td>Clearing/settlement organizations</td>
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<td>Third party processors &amp; online payment providers</td>
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<td>- PayPal, Amazon, Google, Facebook</td>
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<table>
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<tr>
<th>New Mobile Technology Participants</th>
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<tbody>
<tr>
<td>Mobile carriers (MNOs)</td>
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<td>- AT&amp;T, T-Mobile</td>
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<td>- Verizon, Sprint</td>
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<tr>
<td>Handset manufacturers</td>
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<tr>
<td>- Apple (iPhone)</td>
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<td>- Nokia, Samsung, Motorola</td>
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<td>- RIM (Blackberry)</td>
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<td>- Google (Android)</td>
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<tr>
<td>Chip-makers (NFC, SE)</td>
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<tr>
<td>Software solution providers</td>
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<td>Bill-to-mobile vendors</td>
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We have a growing world of third party alternative payment providers.
Mobile payments adoption strong in the developing world
State of domestic and cross-border P2P payments

- Emergence of telecom-centric business models
- Branchless banking using retail agents
- Airtime evolving as form of currency in some markets
- MSBs partnering with carriers – implications for banks?
- More cross-border mobile money transfers as telecoms partner for roaming

Mobile money agent
Source: CGAP 3/17/2010
Mobile Payment Opportunities

- Consumer convenience and efficiency
- Security – in emerging markets safer than cash
- Financial inclusion enhanced as mobile can reach remote geographic locales
- In place of card payments – improved fraud reduction with improved chip intelligence versus higher risk mag-stripe
- Chip technology will allow for better authentication and credentialing to mitigate identity theft, fraudulent payments, and money laundering
- International compatibility using common technology standards for global acceptance
- Cross-selling and convergence with other non-payment mobile services
Looking forward: Fed convenes first mobile payments industry workgroup

- As central bank wanted to understand mobile payments industry development and barriers to adoption
- Boston and Atlanta Fed research groups convened first meeting in January, 2010
- Goal to engender dialogue between key representatives from conjoined telecom and banking industries
- Attendees represented organizations in the mobile payments value chain including: large banks, major mobile carriers, card associations, payment processors, online payment service providers, payment, carrier and merchant trade associations, mobile handset, security and solution vendors
Work group suggests foundational principles

- Use of a mobile device as wallet to include multiple payment options
- Clearing and settlement of payments is through existing channels (credit/debit card, ACH, mobile phone accounts, etc.)
- Near field communication with dynamic data functionality should be deployed for security
- Trusted Service Managers (TSMs) to provision security and manage ecosystem participants
- Technology standards domestically and globally interoperable for universal payment acceptance
- Regulatory clarity will be established
Mobile Payment Industry Workgroup Moving Forward

- Participants have conceptually agreed to a number of basic principles for a future mobile payments environment
- Published position paper representing views of the MPIW – coauthored by Boston and Atlanta Fed
- Industry debate, private negotiations, collaborative work, and escalation of issues will probably follow
- Private experiments and pilots are also likely to continue
- Paper suggests establishing a more formal consortium to meet regularly and continue dialogue that can guide the mobile payments industry going forward
Benefits of Collaborative Approach to Mobile Payments

- Educates and informs diverse participants on different views and concerns around mobile payments
- Can discuss issues and barriers as they are discovered and help with resolution
- May help to avoid risks that occurred as internet payments evolved
- Allows for proprietary innovation while promoting shared framework for interoperability
- May help shape the future payments landscape
Policy and regulatory considerations

- Establish principles for prudential regulation to protect consumers and enhance integrity of payment systems
- International policy and regulation will need to consider shared oversight and work harmoniously as mobile payments cross geographic borders
- Balancing benefits of innovation and paradigm shift in financial inclusion with increased risks presented by digital transfers in telecom-centric services
Where do we go from here?

- The new mobile payments landscape requires dialogue between regulatory authorities for banks and telecoms.
- Need to ensure adequate oversight on country by country level without hampering innovation.
- Cross-border remittances may require improved data sharing on an international basis by central banks, regulators, and law enforcement agencies as services are established in multiple geographic and legal jurisdictions.
- Collaborate with other central banks and industry leaders to find ways to mitigate emerging risks in the mobile channel.
- Service provider programs for KYC and money laundering prevention will be important.
Recent Fed resources on mobile banking and payments:

- **Mobile Payments in the United States: Mapping Out the Road Ahead**

- **Mobile Money Transfer Services: The Next Phase in the Evolution of Person-to-Person Payments**
  Cynthia Merritt, Federal Reserve Bank of Atlanta, August 2010