

# Emerging Risks in Emerging Payments

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Mobile Payments Landscape in the U.S.

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# Federal Reserve Perspective on Mobile Banking & Payments

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- Fed has history of involvement in payments as regulator and operator (check, ACH)
- Fed's role is to ensure the integrity, accessibility and efficiency of the payment system and ensure:
  - Risks to payment system are monitored and well-managed
  - Compliance with consumer fraud protection and privacy requirements
- Use of Mobile device for banking and payments is evolving, albeit in the early stages
  - Question is not IF mobile will be adopted as a payment method, but WHEN
- Fed can help identify potential gaps in regulatory oversight related to consumer security and privacy, and where education is needed, and serve as a neutral facilitator to discuss barriers to adoption between banks and non-banks

# Fed is actively involved in Mobile Industry Efforts

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- FSTC project on mobile vendors and security concerns
- NACHA Internet Council mobile workgroup
- Standards – domestic (X9) and international (ISO) to ensure consistency for mobile message formats and security
- Research on why U.S. was ‘behind’ the rest of the world in implementing mobile banking and payments

# International Mobile Banking & Payments Landscape

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## Developing Countries

- Using SMS for mobile remittances & money transfers (P2P)
  - Huge remittance market in countries with high unbanked populations, high mobile phone penetration and limited landlines
  - Philippines, India, Kenya
- Countries lack banking and physical infrastructure to reach people located remotely
- Mobile Network Operators (MNOs) usually take lead role - have extensive networks of local agents
- Mobile payments replace 'risky' cash - very few alternative payment

## Developed Countries

- Technologically advanced countries
  - Japan, Singapore, S. Korea
- Highly concentrated banking markets
- Initiated by MNO partnering with banks, government, transit authorities
- Enable mobile phones with contactless chips to pay for transit/retail purchases
- Debit card not major payment method
- Mobile payments typically replace cash
- Governments more willing to intervene to ensure success

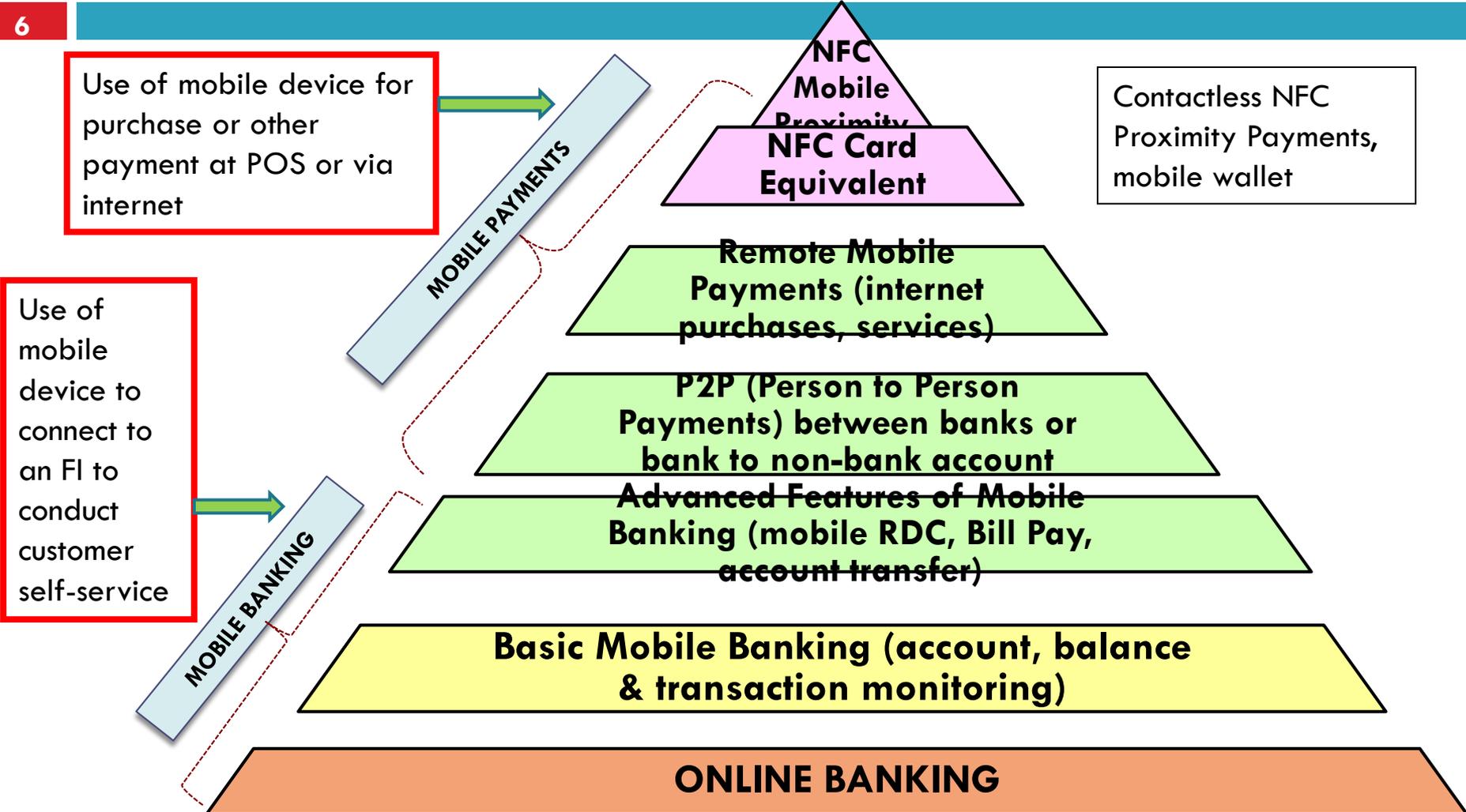
# How U.S. Payment Landscape Differs from Other Countries

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- U.S. has a large country with dispersed and diverse population
- Decentralized transit system that hasn't been a driver for widespread adoption of contactless cards or mobile payments
- U.S. has a well-established, widely adopted electronic payment system with many (safe) payment options to meet consumer needs
- Debit card as a quick & convenient substitute for small value cash and check purchases has superseded urgency for mobile payments
- Easy access to cash at thousands of banks, over 400,000 ATMs and many POS locations

# Evolution from Mobile Banking to Mobile Payments in the U.S.

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# Benefits of Mobile Banking & Payments

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- Speed and convenience of payment for merchant and customer
- Easier access to payment methods and banking services for customer 'on the move'
- Financial management, control of spending with ability to receive alerts, and check balances, recent transactions and purchases in real time
- Eliminates risk of carrying/handling cash
- Reduces fraud by using mobile phone for additional level of authentication

# Challenges to Contactless Mobile Payment Adoption in the U.S.

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- Banks and mobile carriers must resolve customer ownership and agree on a viable business case
- Standards need to be developed for mobile payments related to interoperability between carriers, handsets, and applications; security requirements; business rules
- Clear value proposition for consumer is needed
- More merchants must install contactless readers and handset manufacturers must make NFC contactless phones commercially available in US
- Security and privacy issues must be addressed
- Regulatory gaps must be identified and addressed

# Current Regulatory Landscape for Mobile Payments

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- Many regulatory/rule-making agencies touch payments and/or wireless transactions with little overlap, creating gaps in coverage and liability
  - FI regulators (FED, NACHA, FDIC, OTC, OCC, NCUA, SEC) oversee account management and consumer protection
  - Treasury oversees use for cross border AML/ATF purposes
  - FTC oversees usage for fraudulent or deceptive purposes by companies
  - FCC oversees only mobile carrier standards, competition – no bank oversight
- Underlying payment methods from mobile-initiated transaction covered by existing bank regulations & rules for credit, debit & prepaid cards, and ACH
- Carriers unfamiliar with payments/banking requirements:
  - e.g. KYC, BSA/AML, Money Service Business, risk compliance, consumer protection
- Fed in discussions with Payments Fraud Workgroup (regulators) chaired by BOG staff to raise their awareness of need to look at mobile payments

# Future of Mobile Payments in the U.S.

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- Mobile banking and payments are inevitable
- We should prepare now to avoid pitfalls that occurred with internet payments & develop best practices
- *To that end* – To address the challenges and eliminate barriers to safe evolution of mobile payments in the U.S. the Boston and Atlanta Feds convened a mobile payments industry workgroup in early 2010
  - Included key mobile stakeholders: Mobile carriers, Financial institutions, Card networks, Card acquirers and processors, Mobile payment software firms/service providers, Industry trade groups; Credential/security providers
- Currently working on strategic direction paper for mobile payments based on discussions with group that will be shared industry-wide
- Chance to think in advance and help shape the future of the payments landscape