



Passport to International Payments Perspectives

Panorama 2007
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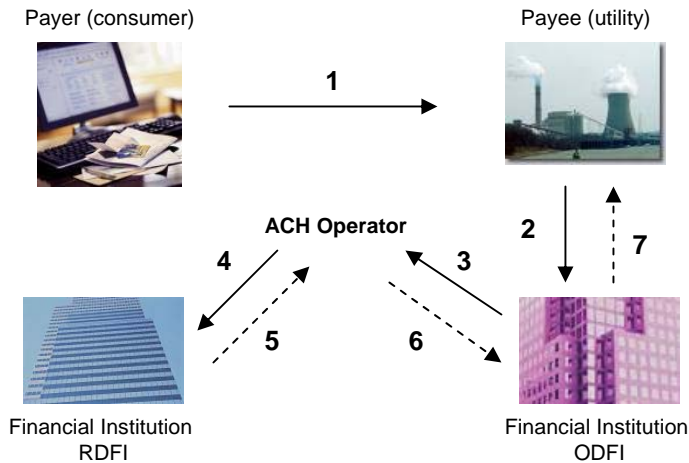
Agenda

U.S. Payments Systems

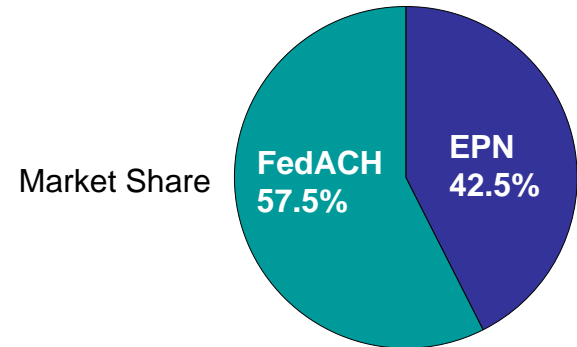
- Overview
- ACH Developments and Opportunities
- Wire Transfer Enhancements
- Image Exchange

U.S. Payments Clearing & Settlement ACH

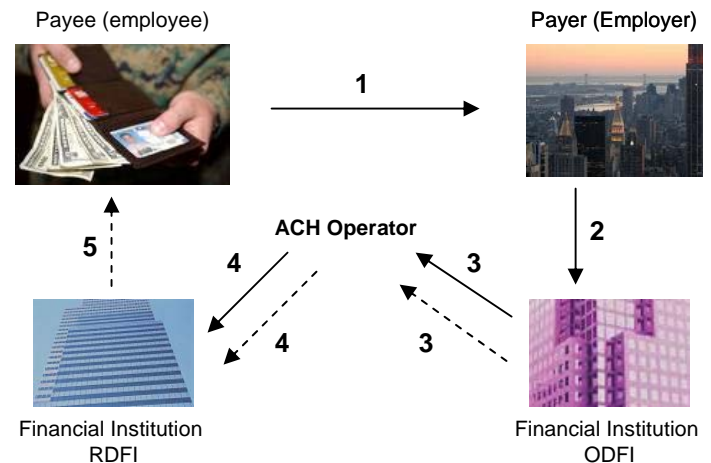
ACH Debit



Dotted lines indicate funds flow

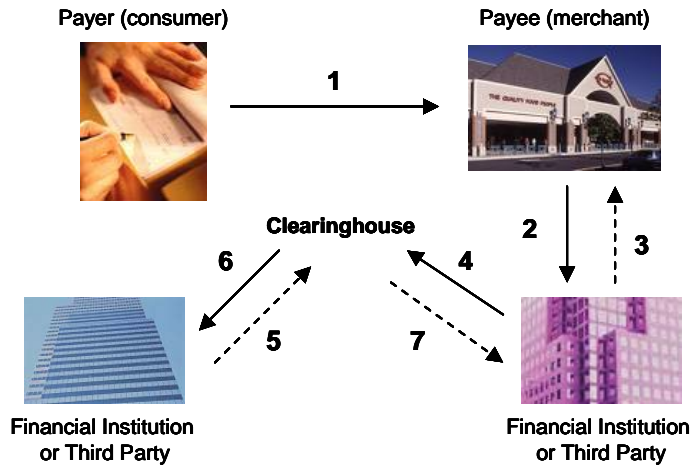


ACH Credit



U.S. Payments Clearing & Settlement Check

Check Clearing



Dotted lines indicate funds flow

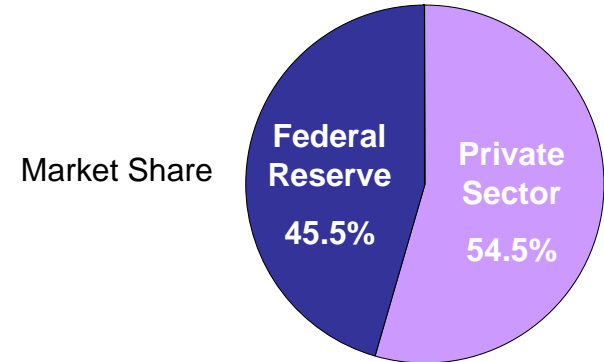
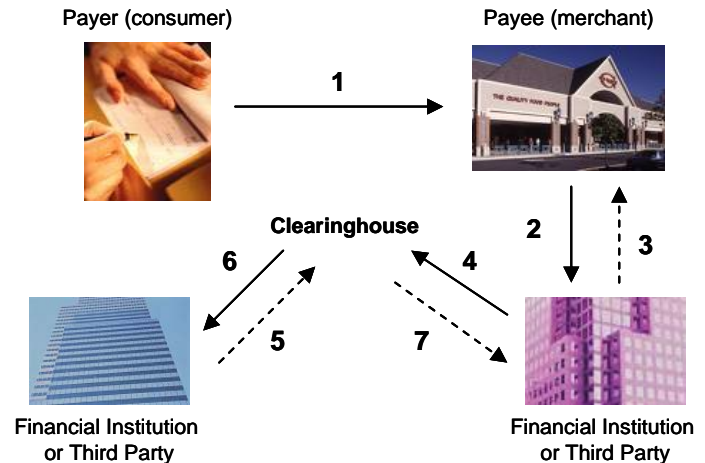
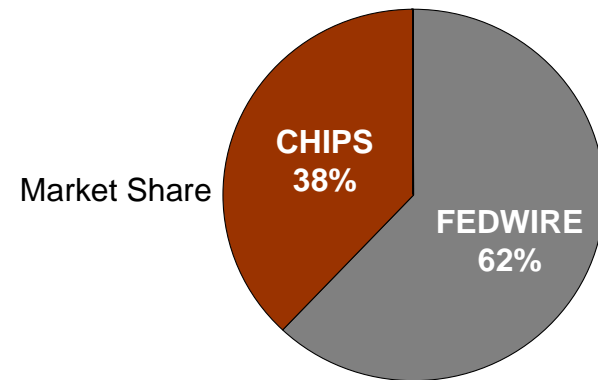
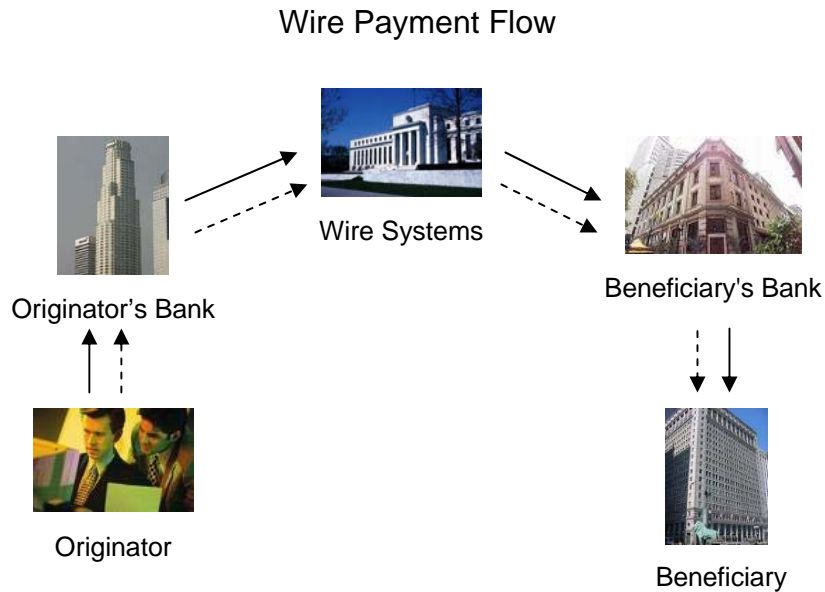


Image Exchange Clearing



U.S. Payments Clearing & Settlement Wire Transfer



Dotted lines indicate funds flow

U.S. ACH – 2006 Highlights

- ACH inter-bank network volume was 16 billion, up 14.5%
- Dollar volume increased to \$30.3 trillion
- Commercial inter-bank volume increased by 15.4%
- Federal government volume increased by 2.8%
- Internet payments reached 1.8 billion, up 35%
- Check conversion applications combined for 2.4 billion items
- Back-Office Conversion began March 16, 2007 – slow start

ACH Market Opportunities International or Domestic?

- International trade is the most significant potential source of cross-border ACH volume:
 - Canada, the European Union, Mexico, Japan, South Korea, China, Taiwan and Malaysia account for more than 75% of US trade.
 - Estimated payment potential of 85 million payments annually based on 2005 data.
 - *Wire transfers and payments via foreign accounts will certainly retain a big share of future volume, limiting the potential for cross-border ACH.*
- The research estimate is that there are 80 million personal remittances from the US to other countries (2005), 80% destined for Mexico.
 - Specialized providers with extensive agent or branch networks in destination countries dominate this business.
 - *It is unlikely that remittances will be a substantial source of ACH volume.*



International ACH Research Conclusions

- Insufficient demand to justify the deployment of full-scale cross-border payment services by ACH operators
 - Estimated potential of less than 85 million payments per year (excluding personal remittances)
 - The Fed's cross-border ACH service has very low volumes, indicating lack of demand
 - Interviews with banks indicate that they do not anticipate high demand
 - Wire transfers and foreign accounts are an effective way to make international payments and are cornerstone international banking services offered by many banks
 - Currently available cross-border services are sufficient to meet demand
 - Preoccupation of potential European partners with the SEPA
- US domestic market – 35 billion potential electronic payments versus 85 million cross border payments – Where would you put your resources?



Law Enforcement & Compliance Issues

US ACH – The Wild West of Payments

- ACH Operators and NACHA are becoming the ACH police
 - Protect consumers from telemarketers and companies with bad business practices
 - Protect corporate and consumer customers from unauthorized account access
 - Aid law enforcement with Internet gambling and tobacco sales
 - Expert witnesses in FTC and criminal proceedings
 - Keep banks out of trouble
- Cross-border activity is limited by OFAC
 - Outbound only activity with FedACH International Service
 - New formats are required to supply more information about originator and beneficiary
 - Tools for financial institution compliance to be deployed
 - Self-regulation is required or OFAC will set its own rules

Same Day ACH

Will it happen on the network?

- No technical obstacles
- Value exchange application
- Long-term can not be restricted to debits
- Credit transactions – may erode volume on RTGS systems
- Bilateral arrangements are currently underway

Native Electronic Payment Opportunities

- New Revenue Applications
 - Business to Business Payments
 - 4-5 billion payments annually
 - Revenue for origination and remittance delivery
 - Account to Account transfers
 - 3-4 billion annually
 - Fees for initiation depending on speed
 - o Next day - \$10
 - o 2-3 business days \$3
 - Compete with Western Union and MoneyGram domestically
- What's needed?
 - Fix broken bank systems – retail and wholesale
 - Origination and Receipt

Situation

U.S. Wire Transfer Systems – Fedwire & CHIPS
Require Automation Enhancements

Enhancing the US Wire Transfer Systems

Dilemma: ISO 20022 or STP 820?

B2B Payments Opportunity

- Domestic
 - The Federal Reserve Study (2001) - 4+ billion payments
 - New study this year
- Global
 - The Clearing House Study – 85 million payments
 - Includes payments already being made by wire and bank proprietary systems
 - Based on 75% of U.S. major trading partners



Corporate Expectations

- Wanted a structured remittance capability for wires for the past 3+ years
- Do not want to wait 10-15 years
- AFP Payments Advisory Group sent a letter of support for STP 820
- AFP group opposes implementation of ISO 20022 in the near term



ISO 20022 - Benefits

- Based on current technology
- Brings multiple standards together
- Global standard potential
- Currently being implemented in Europe
 - Key for implementing SEPA
 - No other viable alternative
 - Time frame for full implementation is extended



ISO 20022 - Barriers

- Cost to the U.S. banking and business community to implement
 - No return on investment for payments system operators or financial institutions (over 15,000 FIs in the US)
 - Businesses of all sizes will need to implement it in their enterprise resource planning (ERP) or accounting systems
 - Cash management and accounting software providers will need to implement the complex standard into their accounting packages
 - Financial Institutions will need to develop remittance delivery capability using the new standard for their business customers
- 20 years before ISO 20022 is broadly adopted by US businesses
- The standard is unproven in any payments systems

STP 820 - Benefits

- Speed to market - large corporations are able to process the STP 820 in their ERP packages without any upgrades or changes
- Cash management software vendors are already implementing the STP 820 for their ACH offering
- Minor implementation effort for vendors for wires
- Banks already have EDI delivery platforms that can be used to deliver the STP 820 to their business customers today
- This is the first step to streamlining front-end applications for business customers
- Most corporations do not have XML in their five-year plan for payments

STP 820 - Barriers

- U.S. Standard
- Some banks do not believe the systems should be upgraded for B2B traffic
- Global banks only want to upgrade once

Bridge to the Future

- Implement STP 820 for wires now
- Ensure that formats can be mapped
- Include 9000 characters of remittance for Fedwire
 - CHIPS has it
 - SWIFT MT103 Remit
- Additional remittance space allows:
 - Reduced expense by all parties to implement
 - ISO 20022 to be carried by SWIFT, CHIPS or Fedwire
 - Banks that want to use ISO can

Pivotal Year for Image Exchange

- May 2007 - annualized rate of image exchange/share is in excess of 8 billion items approximately 25% of total
 - 66% of these items are being received and processed as images
 - 2.6 billion being cleared as substitute checks
 - Approximately \$10 trillion
- 42% of U.S. financial institutions are receiving images
- Federal Reserve, SVPCO, Viewpoint and EndPoint are the major exchanges

Critical Mass for Image Exchange

- Each of the existing networks should double their volume in 2008
- Financial institutions that have not converted will continue to face higher paper clearing prices
- Check clearing volume will continue to decline due to debit cards, ACH check conversion and native electronic payments
- Vast majority of the paper will be long gone by 2010



Thank You