
Direction of Banking Services

Regional & Community Bankers Conference

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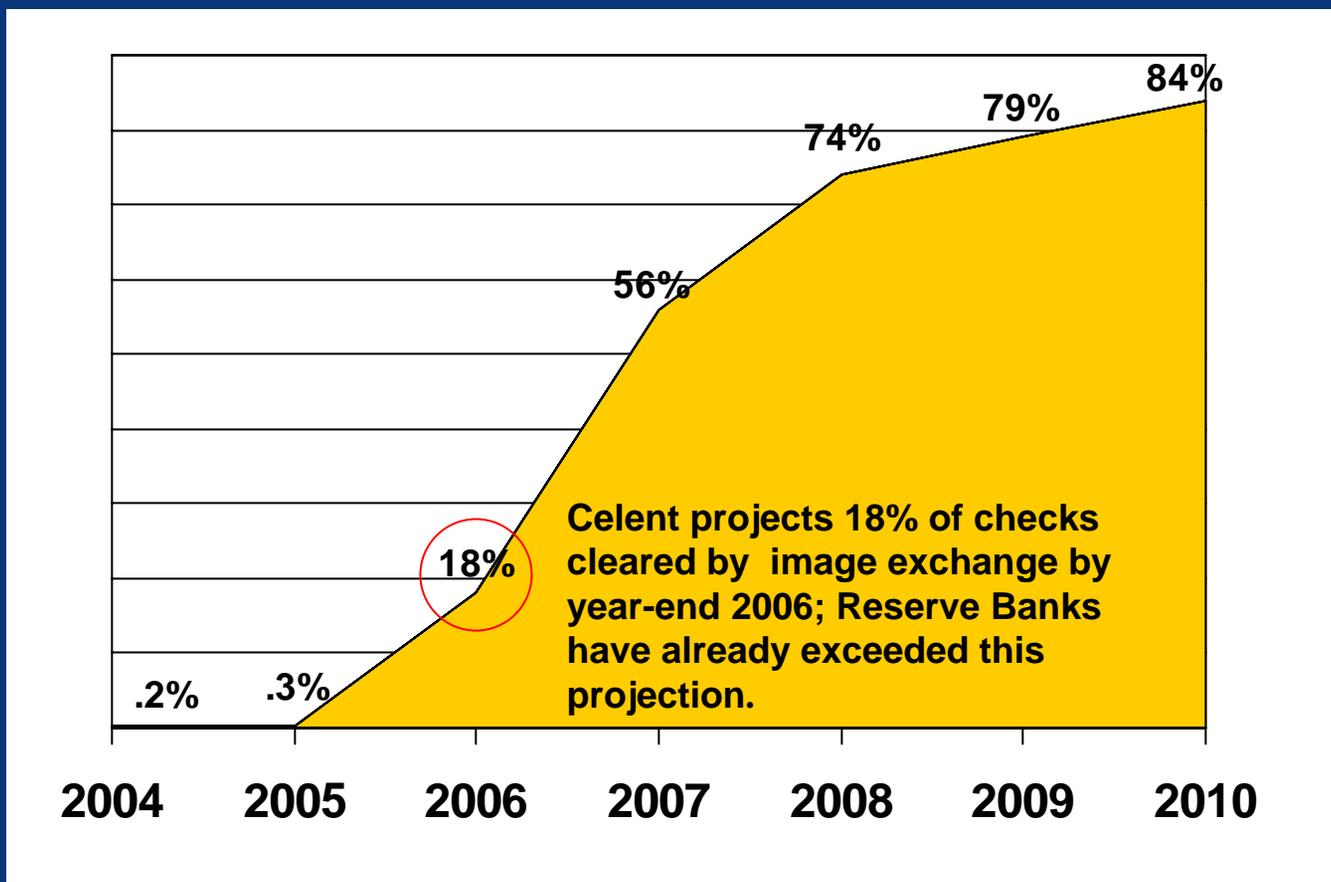
Discussion Agenda

- Retail Payments Update
 - Industry Trends: Image Exchange & ACH
 - Reserve Bank Image Exchange Status Report
 - Back Office Conversion (BOC) – Coming March 15, 2007
- Remote Deposit Capture - Using Check 21 & BOC Together
 - Overview of Remote Deposit Capture
 - Value Proposition - Commercial Deposits
- Questions

Industry Trends: Image Exchange

Trends: Image Exchange is Growing Rapidly

Projected Image Exchange Curve

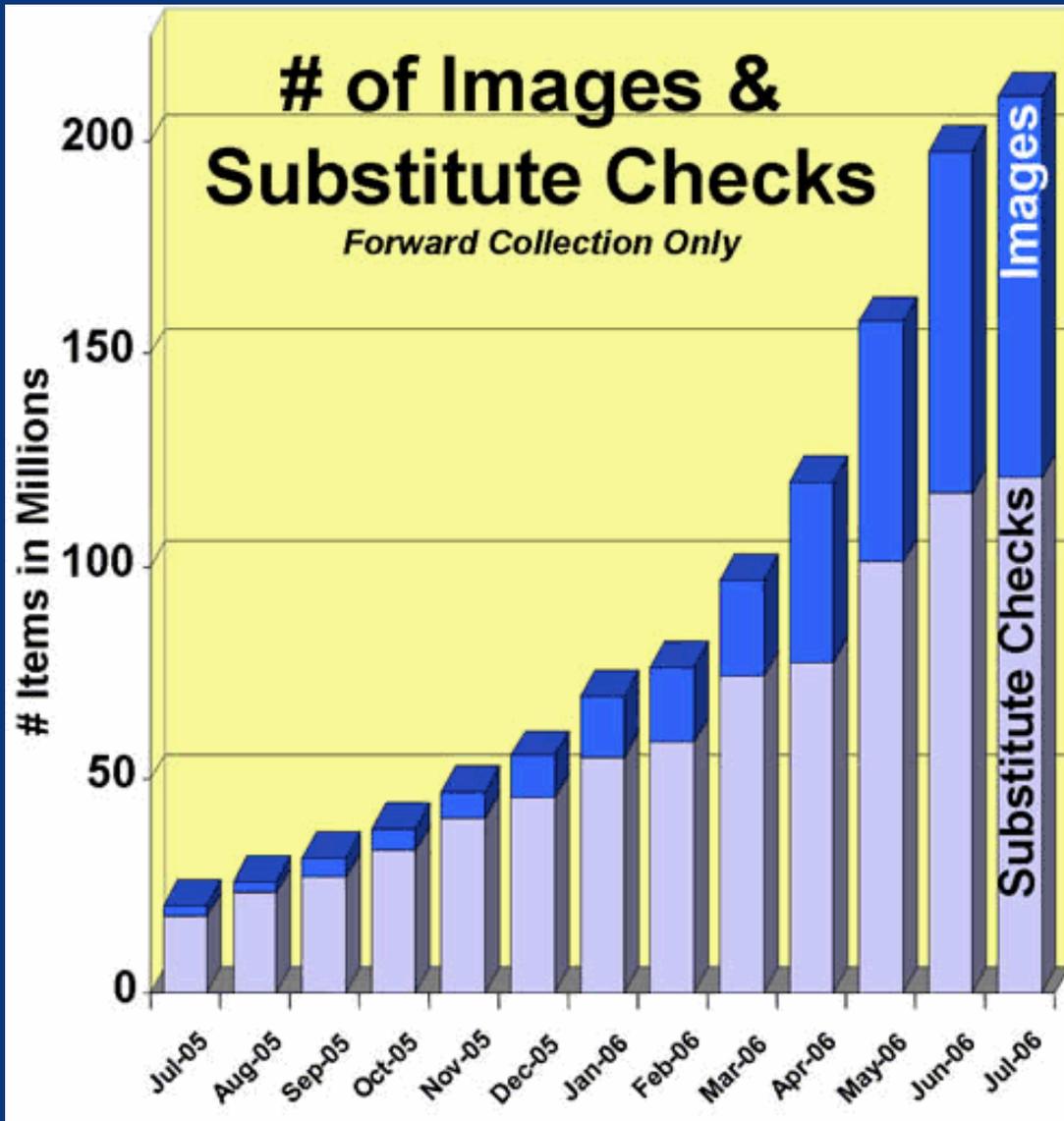


Trends: Image Exchange, Industry Data

Substitute Checks Rising, Image Clearing Rising Faster

- Number of DFIs receiving image files for clearing has nearly doubled over past year
 - Approximately 25% of all US DFIs receive images
- In July 2006, image files reached 96.9 million items
 - 8% increase over June 2006
 - 37 times number cleared in July 05
- July 2005: Ratio was 7 Substitute Checks per cleared image
July 2006: Ratio is 1.25 Substitute Checks per cleared image
- Volume of checks via image and Substitute Checks account for 17% of all check volume
 - Exceeds all credit and debit card payment volume

SOURCE: Federal Reserve/ECCHO Work Group



Highlights:

All checks were imaged before reconversion to substitute checks.

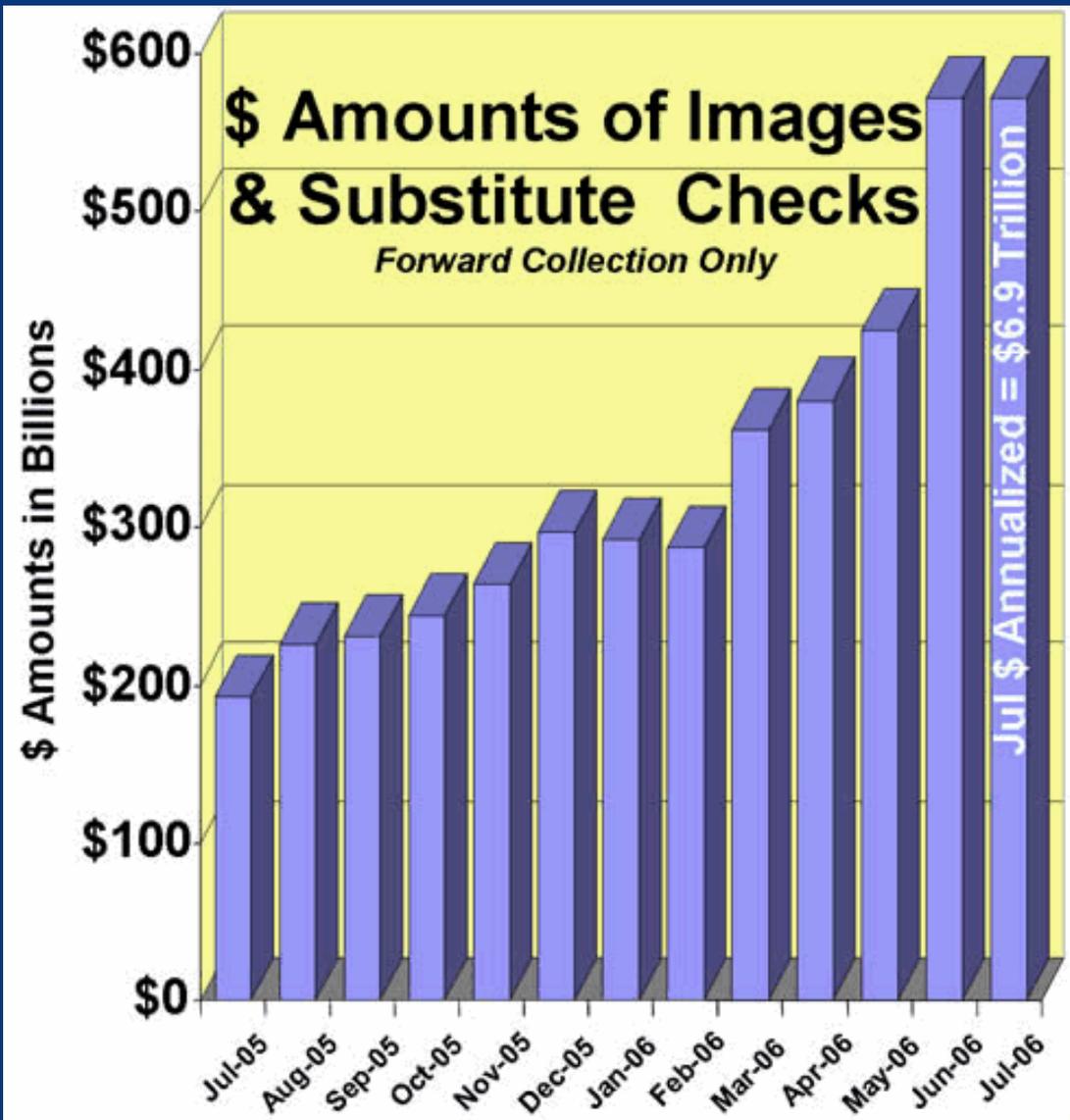
Chart reflects volume received by DFIs for payment from other DFIs or an intermediary.

Image-based clearing volume grew from 20.3 to 217.7 million / mo or by 969.1% with 44.5% of the volume cleared by image in Jul 2006.

The annualized Jul '06 volume = 2.61 billion items/yr.

Data Sources:

Transactions settled through the Federal Reserve, NCHA and SVPCO with no duplicate counting



Highlights:

All checks were imaged before reconversion to substitute checks.

Chart reflects checks received by DFIs for payment from other DFIs or an intermediary.

The dollar amount grew from Jul '05 to Jul '06 from \$192 to \$571 billion / mo or 197%.

Annualized Jul '06 dollar amount = \$6.9 trillion/yr.

\$6.9 trillion is 17% of the total dollars cleared via check and is greater than the sum of all debit card and credit card payments.

Data Sources:

Transactions settled through the Federal Reserve, NCHA and SVPCO with no duplicate counting

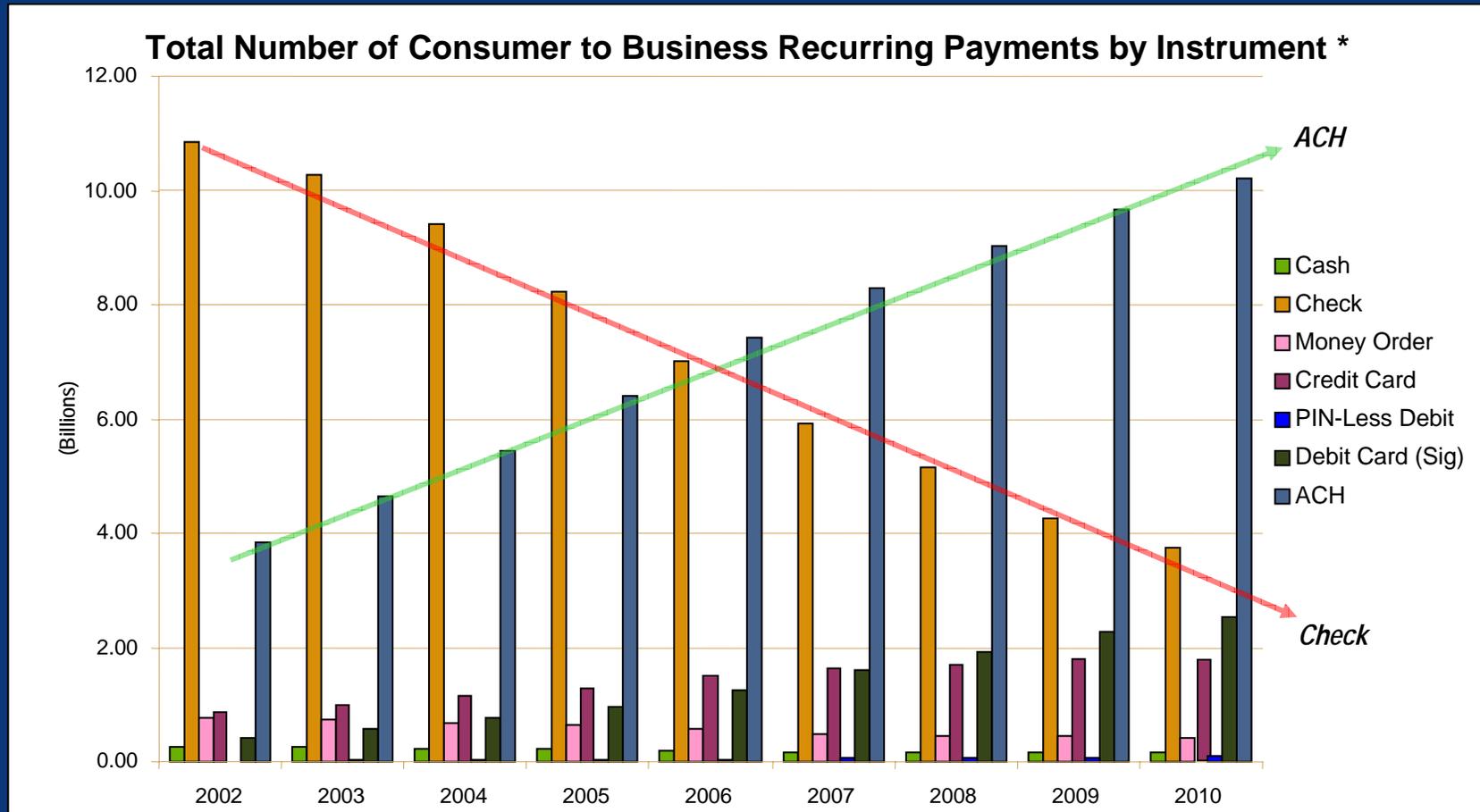
Image Exchange Questions for the Future

- How rapidly will check volumes decline?
- Can industry's infrastructure be scaled appropriately?
- How many players choose to outsource?
- Will investments in image technology pay off?
- How will image exchange strategies unfold in relation to other electronic check options?
- How quickly will industry move to branch capture?
- The answers are still unfolding, but image exchange is clearly the way of the future.

Industry Trends: ACH

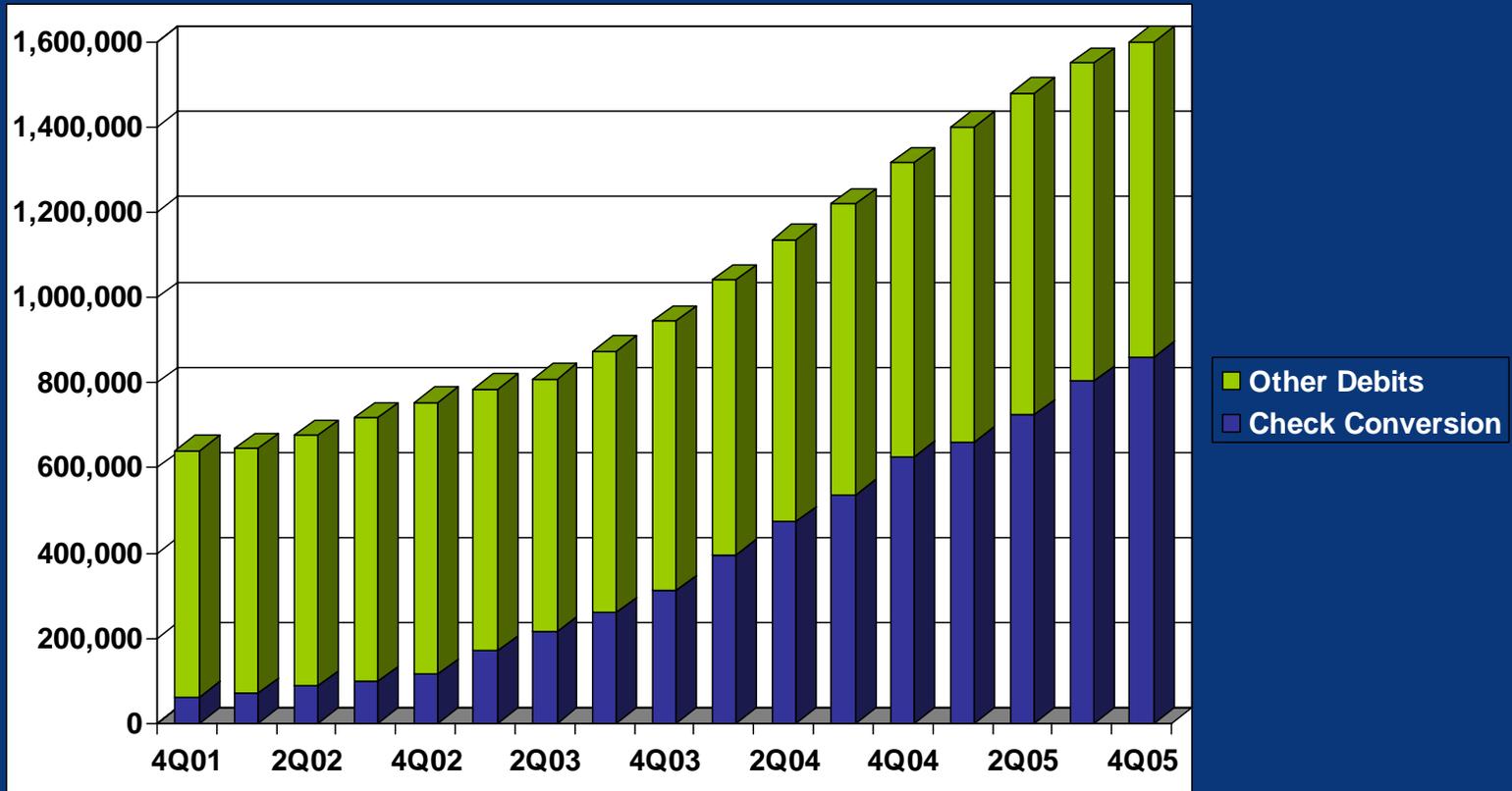
Trends: ACH

While the Use of Checks is on the Decline, the use of ACH is on the Rise



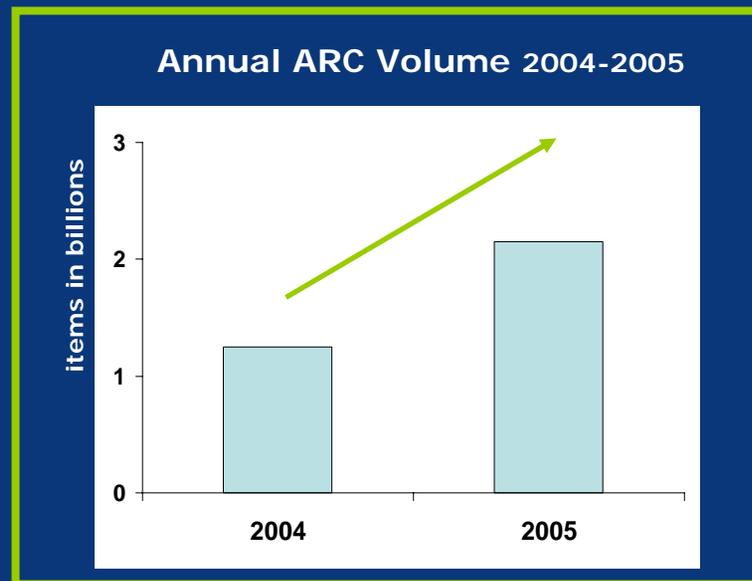
Trends: ACH

ACH Check Conversions (POP, ARC, TEL, Web) Constitute Nearly Half of all ACH Debits



Trends: ACH

- ARC: received at lockbox or remittance locations
 - Conversion of a consumer check received via mail to a single entry ACH debit
- POP: received and converted at Point of Sale
- BOC: received at retailer or manned bill payment locations
 - Effective March 2007
 - More info provided on “Back Office Conversion” during Rules, Regulations and Compliance discussion



The volume of ACH payments increased 16.2% from 2004 to 2005; ARC accounted for 47% of that growth.

SOURCE: NACHA

ACH Industry Issues for the Future

- Integration of back-room operations
- Globalization of retail payments systems
- Rationalization of bank and end-user pricing
- Appropriate risk management procedures
- Introduction of New ACH Services and NACHA rules

Status of FRB Image Exchange Network

Status of FRB Image Exchange Network

- Critical mass building for electronic check solutions, even as legacy volumes decline
 - 75% of business payments still made by check
- Image exchange solutions on everyone's strategic initiative list
- Image exchange coupled with remote capture to achieve best business case
- Deposits moving from high dollar, "West Coast-to-East Coast" focus to "clear all items" solutions, particularly for small DFIs

Status of FRB Image Exchange Network

- As more DFIs enter image exchange, the average dollar value of items processed this way decreases
- More DFIs moving towards full image exchange instead of “High Dollar Cull”
- Business case for the receipt side is more complex
 - But, everyone is moving forward and pace is quickening
- Check 21 returns generally follow electronic receipt
- Interchange networks are just beginning to make progress

Status of FRB Image Exchange Network

- Through July 2006, Reserve Banks processed average of 6.2 million items a day through image exchange
 - Average daily value exceeding \$20.2 billion
- Peak volume second quarter:
8.54 million items valued at \$27.9 billion
- As of September 2006, peak volume was over 12 million items with peak value of \$32.5 billion
- Reserve Banks process close to 45 million checks each night; an average of 23% of these items clear through our Check 21 image exchange network as images and Substitute Checks
 - Industry average is 17%
- Reserve Banks continue to work cooperatively with industry to develop standards for image exchange

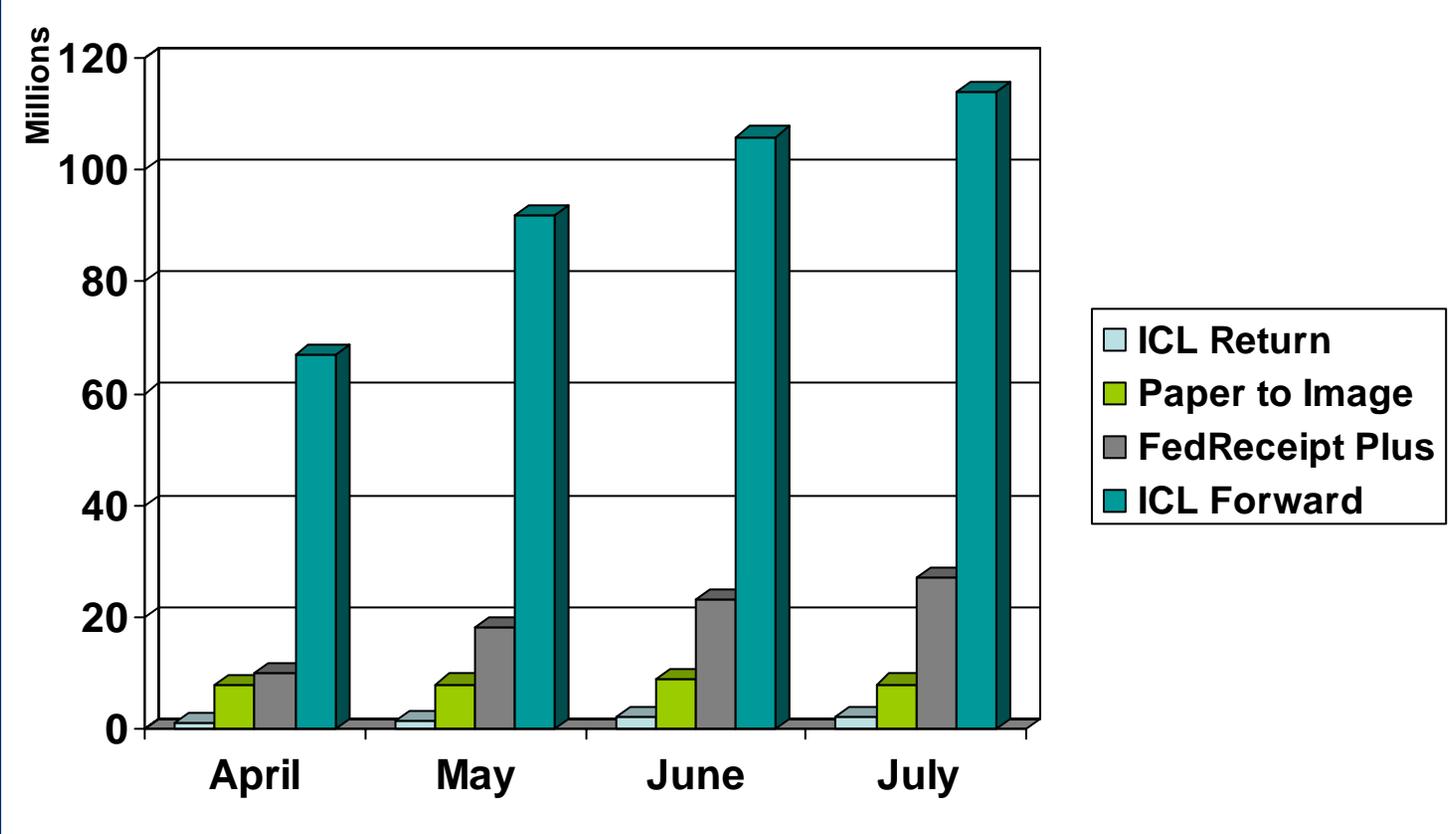
FRB Image Exchange Network September 2006

	First District		FR System*	
	# Customers	# RTs	# Customers	# RTs
FedForward	98	n/a	1,572	
FedReturn	12	n/a	395	
FedReceipt/ FedReceipt Plus	16	477	675	1,789
FedForward Cull	79	n/a	1,545	
Accelerated Paper to Image	7	n/a	180	

***Systemwide, Reserve Banks add an average of 25-30 new customers each week**

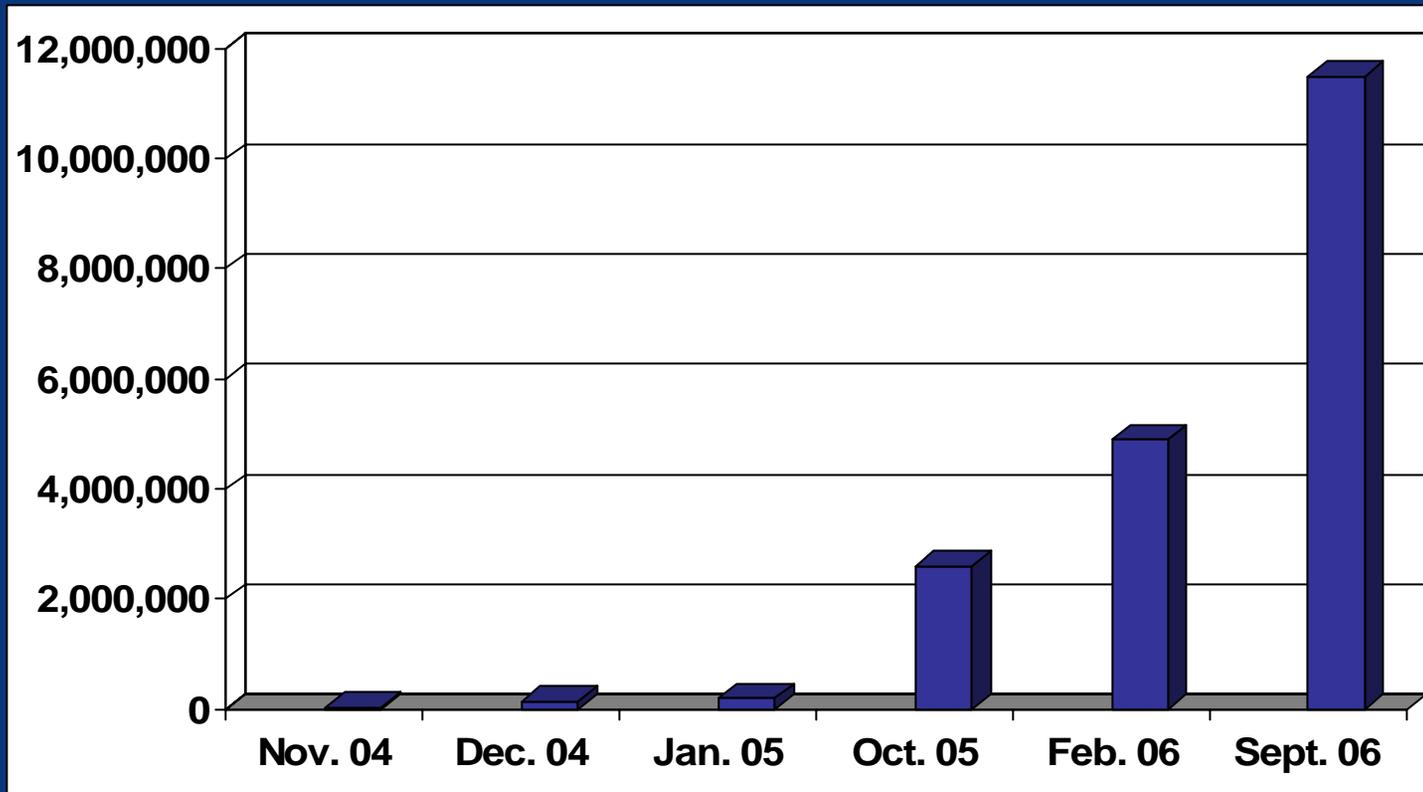
Status of FRB Image Exchange Network

Check 21/Image Exchange Volume 2006



Status of FRB Image Exchange Network

Peak Daily Image Exchange Volume Since Check 21 Act Became Effective



Back Office Conversion (BOC)

Back Office Conversion (BOC), March 16, 2007

- Back Office Conversion (BOC)
 - New NACHA SEC Code
 - Checks written at stores or manned bill payment locations; can be converted to ACH debits in the back-office later on
 - Similar to POP, but checks do not need to be returned to the consumer at the point of purchase
 - Similar to ARC, centralized back office processing
 - Fewer barriers to implementation
 - Single process solution for converting checks at point of purchase or corporate payment location
 - Image and MICR information are captured in a more controlled environment
 - Applies to both consumer and business checks (w/o Aux On-us)

What Can Be Converted

- Checks that:
 - Are provided by Receiver/Payor at point of purchase or manned bill payment location
 - Contain a preprinted serial number
 - Do not contain an Auxiliary On-Us field in the MICR line
 - Are \$25,000 or less in value
 - Are completed and signed by the Receiver/Payor

What Can't Be Converted

- Checks that:
 - Checks that are not MICR encoded
 - Checks with an Auxiliary On-us field in the MICR line
 - Checks greater than \$25,000
 - 3rd party checks
 - Demand drafts and 3rd party checks that don't contain the Receiver's/Payor's signature
 - Checks provided by a credit card issuer for purposes of accessing a credit account

What Can't Be Converted

- Home equity checks
- Checks drawn on an investment company as defined by the Investment Company Act of 1940
- Obligations of a financial institution
- Checks drawn on the U.S. Treasury, a Federal Reserve Bank, or Federal Home Loan Bank
- Checks drawn on a state or local government that are not payable through or at a participating DFI
- Checks payable in a medium other than U.S. currency

Remote Deposit Capture:
a.k.a.
Corporate/Commercial Capture

Overview of Remote Deposit Capture

- Process where original paper checks are truncated at a capture location and collected either as:
 - An ACH transaction (ARC today & BOC in the future)
 - A check image or substitute check
- Includes Branch Capture, ATM Capture, Corporate Capture, and Merchant Capture

Overview of Remote Deposit Capture

Client Locations

RDC Client Application

Operator:

- Authentication
- Image Capture
- MICR Capture
- Amount Correction
- Image Review
- Deposit Review
- Reporting

Supervisor:

- Administration
- Review/ & approve
- Reporting



Fire Wall

Central Processing (Bank or host)

RDC Server Application

- Security
- Client Provisioning
- Business Logic
- Deployment
- Image Recognition
- Image Quality
- Risk management
- Correction & Balancing
- Reporting engine
- System Interfaces

ACH System

- Conversion
- Origination

Check System

- Collect
- Posting Interface

Other Systems

- ACH Network
- Posting System
- Image Archive
- Online Banking
- Image Exch.

X9.37

Note: functionality varies among solution providers



SCs for Sorter Processing

Value Proposition – Commercial Deposits

- Value Spectrum of Remote Deposit Capture



Value Proposition – Commercial Deposits



- Remote Deposit Capture has the potential to expand your footprint and increase your commercial deposit base by eliminating transportation constraints
- Customers will no longer have to drive items to deposit locations or foot the expense of a courier
- You now have the ability to attract customers from outside your existing footprint, as well as get the deposit business of existing commercial lending customers that are geographically distant from your locations

Value Proposition – Commercial Deposits



- Automation such as CAR/LAR and OCR at the customer level improves deposit quality and increases overall collection efficiency
- Your customers will have the flexibility to integrate Remittance Processing and Treasury Deposit functions using one distributed capture platform to scan payment and remittance data

Value Proposition – Commercial Deposits



- Corporate customers can consolidate DDAs and eliminate sweeps into a cash concentration account – potentially increasing your commercial deposit base
- There will be ever increasing competition for commercial deposits
- A 2005 study indicated that the breaking down of geographic and price barriers associated with remote capture could trigger the shift of \$150 million to \$200 million in commercial deposits in the near term

Value Proposition – Commercial Deposits



- Dollars are collected faster – you can give customers 100% availability on their deposits because virtually all dollars can be collected next-day
- You can extend your deposit cut off times because you will no longer need to process and transport a piece of paper
- Improved availability results in improved cash flows and working capital for your customers

Value Proposition – Commercial Deposits



- The faster an item clears, the faster it will be decisioned and returned – so you and your customers will know which items will not going to be paid sooner than you do today

Conclusion

- Existing payments systems evolving, continually moving towards electrification
- New payments vehicles are available and influencing how consumers and corporations make payments
- Checks still a recognized payment system for corporations and retailers and will be around for a while
- The line between Check 21 image exchange and ACH continues to blur and overlap – ARC, POP, and coming soon, BOC
- You as DFIs can position yourself using remote capture and other technologies to take advantage of these new payment types to better compete in the market for commercial deposits

Questions?
