



What is happening in the world of paper payments?

- "Ups and downs"
- Increasing ACH volume
- Growth rates at the Federal Reserve
- Rise in card-based payments
- Virtual payment systems

"Ups and downs" Checks are down and costs are up The number of checks processed by the Federal Reserve decreased for the fourth consecutive year in 2003. It processed 15.81 billion checks in 2003, a 4.7% decline from 2002.*

The unit cost to the Fed to process a check in 2003 increased by 13.3%, from 4.5 cents in 2002 to 5.1 cents in 2003.

* The 2003 rate of decline was the steepest of the past four years, more than doubling the 2002 rate of decline of 1.9%.

ACH is up and costs are down

- The Fed's commercial ACH volume increased by 12.1% in 2003 to 5.59 billion payments.
- The Fed's unit cost to process an ACH payment decreased by 15.4%, from 1.3 cents in 2002 to 1.1 cents in 2003.

Source: NACHA





Rise in card-based payments

- Payment cards include standard credit cards, debit cards, and stored value cards.
 - Credit card payments will increase from 6% of payments in 2003 to 8.9% by 2008.
 - Debit card payments will increase from 0.8% to 1.5% during the same time period.
 - Legislation requires government benefits payments to be distributed electronically by 2007.
 - Child support payments are being disbursed via stored value cards in four or five states, with others quickly adopting.
 - 48 states, the District of Columbia, the U.S. Virgin Islands and Puerto Rico have online food stamp EBT systems. California is in the process of expanding statewide.

Sources: Building Payments into e-Government Initiatives, PayStream Advisors (Fall 2003), Centers for Medicare and Medicaid Services Web site

Virtual payment systems

- Virtual payment systems include digital cash and electronic wallets.
 - Lack of standards and protocol and the inability of governments to track movement of funds have inhibited acceptance of digital cash payments.
 - E-wallets, however, are on the rise. Constituents do not like to fill in the same information over and over; ewallets provide government agencies with a secure storage place for credit card data, owner identification, e-cash, and owner contact information.
 - Examples of e-wallets in the private sector include Amazon's "1- Click", Microsoft's .NET Passport and Yahoo! Wallet.

Sources: Electronic Payments Primer, National Electronic Commerce Coordinating Council (October 2002)

Multi-channel taxpayer access to government



Moving Checks to Electronics

- Check 21 Overview
- What does Check 21 include?
- Substitute checks: examples, use and acceptance and why
- Electronic check presentment: physical vs. image delivery
- ACH check conversion

Overview

- On October 28, 2004, the Check Clearing for the 21st Century Act, more commonly known as Check 21, becomes law.
- Check 21 is a bill sponsored by the Federal Reserve Bank and signed into law by President Bush on October 28, 2003. It is also known as the Check Truncation Act.
- This legislation was pursued as a result of the events surrounding September 11, 2001.
- The Fed's objectives:
 - Facilitate check truncation and promote the use of electronics
 - Foster innovation without mandating receipt of images
 - Improve overall efficiency of the nation's payments systems

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What does Check 21 include?

- Check 21 creates the legal equivalence of the original check and a "substitute check".
- Designed to encourage check truncation by removing key barriers
- Excluded from legislation:
 - Image exchange and ECP
 - Check safekeeping products
 - Other truncation products

Substitute checks

- A substitute check is the legal equivalent of the original check for all purposes.
 - Contains images of front and back of check
 - Conforms to industry standards
 - Magnetic ink character recognition (MICR)
 - Physical characteristics of check
 - Accurately and legibly represents original check
 - Suitable for automated processing
 - Bears image replacement document (IRD) and indemnity legend
 - Includes all endorsements, physical and electronic
 - Includes identification of creating party

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Use and acceptance

- The use of substitute checks does not require an agreement between parties.
 - Any party receiving a substitute check must accept it, including the parties in forward collection process and in returns (unpaid) process.
 - All checks may be converted to substitute checks, including consumer and commercial checks, government checks, cashier checks, money orders, traveler's checks, etc.

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- Primary benefit is faster collection and return of checks.
 - Banks could use image technology and print substitute checks closer to receiving banks eliminating transportation.
 - Banks could automate retrieval and processing of return items.
 - Branch and ATM deposits could be captured and image processed, eliminating transportation.
 - Use of substitute checks will allow banks to truncate 100% of transit items.



Electronic check presentment (ECP) with physical check delivery: today

- This option facilitates more efficient processing by allowing the paying bank to electronically receive MICR data ahead of the physical checks.
 - The paying bank debits their customer accounts on the day of receipt of the MICR file (a day sooner than normal).
 - Most banks hold commercial accounts from end-of-day posting and process the paper items the next day.
 - Physical items are delivered later, then are available for exception handling (NSF, stop payments, etc.), and may be returned with statements.

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ECP with image delivery (image exchange): pilots this year

- The Clearing House Vanguard Bank participants (eight lead banks) are scheduled to conduct image-based ECP pilots this year.
 - Pilot programs will facilitate the same process as current ECP models, but instead of transporting physical checks, participants will exchange images of these items.
 - Most banks will continue to exclude commercial items.
 - Images are available for exception handling (NSF, stop payments, etc.) and for statementing.
 - The process will enable next-day (one-day) settlement with depositing banks.
 - We anticipate the development of a same-day-settlement image exchange window, but it does not exist today.

ACH check conversion

- Single-entry ACH debit, consumer checks only
 - Check becomes "source document," no longer a check, but an ACH regulation E transaction
 - Accounts receivable conversion (ARC)
 - Check payment mailed to biller/lockbox or placed in drop box
 - Notice on bill equals authorization
 - Check is imaged and destroyed within 14 days; image retained for two years
 - Point of purchase (POP)
 - Individual presents check at pay window or point of sale
 - Authorization required at time of transaction
 - Consumer-as-keeper current model

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New Collection Alternatives: Large-Value Checks





Scenario: Corporate client collecting \$250 in-person and drop box payments in numerous locations, consumer and corporate payments

• Option 1 Maintain local depository relationships in every market, reconcile branch deposits, forecast cash and concentrate into headquarters

(roughly 80 percent of items); no business items

electronically deposit into headquarters

•Option 4 Check 21: If check cannot be exchanged or converted to ACH, capture at branch and deposit substitute check in concentration bank

New Collection Alternatives: Best Fit Analysis

Substitute Checks

- For larger value checks if expedited clearing is available, or if transportation costs or delays exceed cost of image handling.
- For distributed-capture checks on non-image exchange banks.

Image Exchange and ECP

- Image exchange or ECP applies if expedited clearing is not available.
- Low-value business or consumer payments • Distributed capture of business or consumer payments

ACH Check

- Low value consumer remittance payments via lockbox (ARC)
- Low value consumer remittance
 payments in person (POP)

Non image points Large-value checks Expedited clearing

Low-value business or consumer payments **Distributed** capture business or consumer payments

Low-value consumer remittance payments

Distributed capture of consumer payments

How will these new collection alternatives impact you?

- Key points
- Items to assess
- Strategic realities
- Impact on collections
- Impact on disbursements

Key points

- The use of substitute checks does not require an agreement between parties.
 - Check 21 and the evolution of other electronic channels (like image exchange) are primarily a back-office change affecting how banks clear and settle items. With electronification, these back-office changes can be extended to you via:
 - Image cash letters and deposits
 - Distributed capture solutions
 - Expedited processing and notification of return items
 - Electronification is expected to lower operating costs and expedite funds availability; however:
 - Declining check volumes are contributing to rising costs.
 - With 80% of items collected in one day, limited improvements in float are available.
 - The industry is years away from a widely adopted image exchange process.

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Items to assess

- Depository and collections
 - Is your internal deposit-gathering process of taxes, fees and licenses (at agencies or at your remittance center) image enabled?
 - What volume of exception payments flows through your agency or remote offices that could be expedited via distributed capture solutions?
 - What impacts could electronification have on your operations, such as end-of-day extensions, depository account consolidations, agency collections or process reengineering?

Items to assess (cont'd.)

- Need for original items
 - Do you have any requirements to receive and archive original cancelled (paid) checks or drafts?
 - Is this requirement based on legislative statue, perceived requirements or operational practices?
 - Do you have any needs to process original items on check processing or scanning equipment for additional output?
 - Do you require your constituents to produce an original paid check to prove payment of an obligation?

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Strategic realities

- Image exchange is the desired end-state, but is dependent on adoption by thousands of banks.
 - Substitute checks may prove to be more expensive than traditional checks, and at current interest rates may prove feasible only for certain transactions:
 - Large value with expedited settlement
 - Items with transportation delays
 - Automation of NSF items
 - The Fed's ultimate objective is to eliminate all float.
 - Check volumes are declining, putting more pressure on operating costs and site consolidations.
 - Most checks (91%) are under \$1,000, and require physical check processing until image exchange is more broadly in place.
 - Movement to an all-image environment will take many years.

Impact on collections

- Use of the following solutions will help optimize the collection of funds. These new clearing options position you to take advantage of this optimization process.
 - Image cash letters
 - Reduce transportation costs or delays
 - Provide later cutoff times for deposits
 - Perform image quality testing
 - Optimize clearing and settlement
 - Distributed capture solutions
 - Capture images in remote agency offices
 - Create/transmit deposits
 - Optimize clearing and settlement

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Impact on collections (cont'd.)

- Enhancements to wholesale and retail lockbox services
 - Ability to expedite the clearing of items and pursue the optimal clearing channel, utilizing tools and methods discussed in the depository services section
 - Extension of end-of-day processing windows
 - Enhanced distributed capture solutions to also support integration of remittance data for Accounts Receivable posting
 - Faster notification of return items, including integration of original remittance data and return item images

Impact on disbursements

- Expedited settlement of collection items impacts core disbursement products by reducing disbursement float.
 - Controlled disbursement and warrant endpoints will be the likely targets for substitute checks attempting to reach same-day-settlement windows or high dollar group sort cutoffs for large value checks.
 - Most ECP and image exchanges will likely exclude controlled disbursement routing numbers (initially) and government routing numbers used for warrant processing.
 - Your vendor should be prepared to support the seamless integration of substitute checks into its disbursement product set. The disbursement product set should be completely image-enabled with online and PCbased archival and reporting tools:
 - Ability to view and print historical items from the archive or current-day exception items
 - Allow customer service staff to access the image archive
 - Archival via online services and CD-ROM

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