

**Payment Channels,  
Processing and  
Funds Availability**

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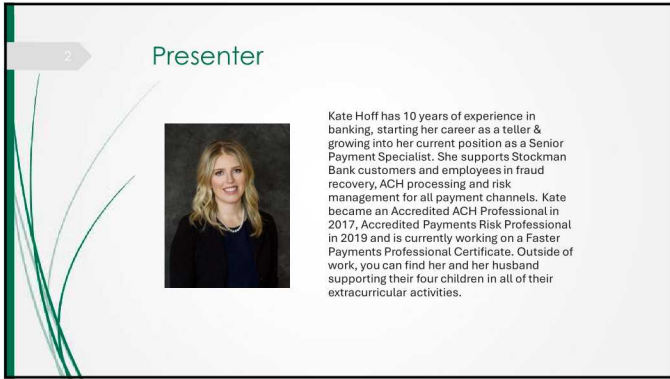
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**Presenter**



Kate Hoff has 10 years of experience in banking, starting her career as a teller & growing into her current position as a Senior Payment Specialist. She supports Stockman Bank customers and employees in fraud recovery, ACH processing and risk management for all payment channels. Kate became an Accredited ACH Professional in 2017, Accredited Payments Risk Professional in 2019 and is currently working on a Faster Payments Professional Certificate. Outside of work, you can find her and her husband supporting their four children in all of their extracurricular activities.

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**Agenda**

This presentation will cover a general overview of payment channels available and when you are "safe" to assume the funds are collected.

- Payment Channels available
  - Business vs Consumer
- Payment Processing within channels
- Clearing vs Settlement
  - When your funds "good"
- Fraud Scenarios and Statistics

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### What are Payment Channels?

- Payment channels are a set of processes and technologies that transfer monetary value from one entity to another.
- Payment channels are used as cash substitutes, such as checks or electronic messages, to create the debits and credits that transfer value.

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### Payment Channels in Use

- Checks
- Wires
- ACH
- Cards
  - Debit and Credit
- Real Time Payments/Faster Payments
  - Zelle, Venmo, Paypal & FedNow

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### Participants in each Payment Channel

Each channel has their own name for sending and receiving participants:

- ACH - Originator and Receiver
- Wires - Sender and Beneficiary
- Checks - Payee and Payer
- Real Time Payments - Sender and Receiver
- Cards - Card Holder and Processor

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### Participants cont.

- ACH Network
  - Originating Depository Financial Institution (ODFI)
  - Receiving Depository Financial Institution (RDFI)
  - ACH Operator – such as the Federal Reserve
- Wires
  - Sending Bank
  - Receiving Bank
  - Intermediary Bank
- Checks
  - Paying Bank
  - Receiving Bank
- Real Time Payments
  - Sending and Receiving Bank
- Cards
  - Card Issuer (paying bank)
  - Acquirer (vendor/merchant's bank)

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### Processing through Payment Channels

- Payment Instructions
  - Information from a payer, telling the paying bank to transfer the value to the beneficiary or payee through the receiving bank.
- Payment Generation
  - When the instructions are entered into the channel
- Clearing
  - Where the FI's use the instructions to transfer money between themselves (on behalf of the payor) and the payee.
- Settlement
  - When the bank transfers money between themselves.

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### Processing Through Payment Channels

- Credit/Push transactions
  - Payments initiated when a payer sends a payment order with instructions to transfer funds to the payee.
  - ACH, Wire, Check & Faster Payments
- Debit/Pull transactions
  - A payment made after prior authorization by the payer. The payee sends the payment instruction to the payee's account to draw on funds from the payer.
  - ACH and Card

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### Clearing Vs Settlement

- Clearing is the process by which the payer's and payee's financial institutions exchange payment information to validate transactions prior to settlement.
- Settlement is the final stage of a payment transaction to complete the funds transfer after the clearing has already been validated and completed.
- Clearing is determining the obligations of who owes who and settlement is the process of fulfilling those obligations.

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### Net vs Gross Settlement

Real time gross settlement is the continuous process of settling payments on an individual order basis without netting debits with credits across the books of the central bank.

Net Settlement is batching the incoming credit and debit transactions to into one file.

- After the financial institutions transmit their respective ACH debit and credit activity the Federal Reserve will debit and credit the financial institutions accounts held at the Federal Reserve for settlement.

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### Settlement timing

- ACH is a batch process, meaning the originating financial institution will process multiple files from multiple originators in one "upload" the ACH Operator. KH1
  - Same Day vs Next Day settlement.
- Wires settle almost instantly after being initiated.
  - Transfers are processed individually and settled by debiting the Federal Reserve Bank account of the sending depository financial institution and simultaneously crediting the Federal Reserve Bank account of the receiving depository financial institution.
  - 3:30 PM close 4:30 has to be settled with the Federal Reserve
- Checks process in a net settlement type setting
  - Typically within 24 hours
  - We send out approximately 3 cash letters at end of day.
    - Stockman Bank holds the debit when checks are deposited then we pull the funds the next day after the cash letter has gone out.

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## Slide 11

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**KHO** Net Settlement is how cards are processed as well, but for the sake of this presentation we will discuss this process with checks and ACH.

Kate Hoff, 2024-11-03T04:24:18.780

## Slide 12

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**KHO** ACH processing - discuss differences between FIs in upload timings and when those process.

Kate Hoff, 2024-11-03T04:32:57.428

**KH1** Wires: discuss typical 9-3 PM timeframe. confirm with Wire Desk

Kate Hoff, 2024-11-03T04:35:20.994

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### Check clearing

- Payor wrote check from his account at another FI and deposited to his Stockman Account on Wednesday
- Thursday he realized another item was debiting his account and he would not have funds to cover the check.
- He placed a Stop Pay on Thursday
- The item was actually returned as a Stop Pay on Friday
- Received the Stop Pay Monday

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### "Good" Funds

Wires are final and irrevocable upon completion of processing by the Federal Reserve Banks. Recipient has to agree to return the funds.

Checks  
 NSF/Stop Pay/Account Closed etc. have a 24 hour return timeframe  
 Forgery: For the most part is 24 hours  
 Forged Endorsement: up to 3 year return timeframe.

ACH has multiple return timeframes:  
 Business ACH (CCD) on a Business account must be returned within 2 banking days.  
 Consumer ACH (WEB/PPD) may be returned up to 60 calendar days.  
 Business ACH on a consumer account may be returned up to 60 calendar days.  
 Credit ACH transactions on consumer or business - receiver may request funds be returned at any time.

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### Fraud

In 2023, the IC3 (FBI's Internet Crime Complaint Center) received 21,489 BEC complaints with adjusted losses over 2.9 billion \*

- Business Email Compromise
  - In March 2023 an individual in Stamford, Connecticut was in the process of purchasing a home and received a spoofed email from their supposed attorney instructing them to wire \$426,000 to a financial institution to finalize the closing. Two days after the wire was initiated, it was realized the instructions came from a spoofed email.
  - 9,521 Real Estate complaints in 2023, totaling \$145,243,348.

\*[https://www.ic3.gov/AnnualReport/Reports/2023\\_IC3Report.pdf](https://www.ic3.gov/AnnualReport/Reports/2023_IC3Report.pdf)

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### Even checks are changing:

Reg CC defines a check, amongst other criteria, as being derived by paper.

An electronically created item (ECI) begins as an electronic image and is printed.

eChecks are not considered a check under Reg CC.



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Remotely Created Checks (RCC) are typically created by a credit card company, utility company or telemarketer after an account holder authorizes the creation over the telephone providing the appropriate information, including the MICR data.

RCCs may be processed through the check clearing networks. In place of a signature, it will typically have a statement that the account holder authorized the check.



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### Questions & Comments

Nacha Rules Online: <https://nachaoperatingrulesonline.org/>

FBI IC3 Reporting: <https://www.ic3.gov/>

Federal Reserve Resources: <https://www.frbservices.org/resources>

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