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Check Clearing For the 21st Century: Substitute Checks Not Sufficient In Disputes Alleging Fraud

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I. INTRODUCTION

Over the last several years, consumers have embraced the use of electronic payments. Credit cards and debit cards have grown rapidly in popularity. One study reveals that credit and debit cards account for 52 percent of transactions at the point-of-sale, while cash and checks combined account for 47 percent.¹ With the trend toward electronic payments growing, retailers, merchants, banks, and billing companies seek more cost-efficient methods for processing checks. The U.S. economy depends on the ability of consumers and businesses to reliably make and receive payments routinely, safely, and efficiently.

Despite a movement toward electronic payments, no other industrialized nation relies on checks as much as the U.S.² Forty-two billion checks are written each year in the United States.³ In today's check processing environment nearly all checks are physically presented to the paying institution for collection. Transportation of these checks is costly, and the float they create can leave financial institutions vulnerable to fraudulent schemes. As with so many other things, the terrorist attacks of September 11, 2001 exposed the true vulnerabilities of the check processing system, which was severely impacted when checks were delayed days and in many cases weeks

¹ *Dove Consulting Study 2003-04*, AMERICAN BANKER, Dec. 16, 2003.

² Alan Koenigsberg & Amy Smith, *Converting Paper Checks To Electronic Payments: What You Need To Know*, at <http://www.jpmorgan.com> (last viewed March 22, 2006).

³ Sarah Malmfeldt, Note, *America Checks into a New Banking Era with Check 21*, 17 LOY. CONSUMER L. REV. 209, 212 (2005).

because of stoppages in the courier system.⁴ This event was a major factor that helped motivate Congress to begin legislation to reduce our reliance on physical transportation and improve the overall efficiency of the system.⁵

After much debate and revision, The Check Clearing for the 21st Century Act (“Check 21”) passed the House, Senate, and received the President’s signature, which now puts banks⁶ one step closer to an all-digital future. “Check 21 is designed to foster innovation in the payments system and to enhance its efficiency by reducing some of the legal impediments to check truncation⁷.”⁸ The law supports check truncation by producing a substitute check,⁹ which permits banks to truncate original checks, to process check information electronically (electronic

⁴ Malmfeldt, *supra* note 3, at 214-15.

⁵ *See id.* at 215.

⁶ Check 21 defines “bank” as “any person that is located in a State and engaged in the business of banking and includes (A) any depository institution (as defined in section 19(b)(1)(A) of the Federal Reserve Act); (B) any Federal Reserve Bank; (C) any Federal home loan bank, or (D) to the extent it acts as a payor—(i) the Treasury of the United States, (ii) the United States Postal Service; (iii) a State government, or (iv) a unit of general local government (as defined in section 602(24) of the Expedited Funds Availability Act [12 U.S.C. § 4001(24)].” 12 U.S.C. §5002(2) (2005).

⁷ Check 21 defines “truncate” as “remov[ing] an original paper check from the check collection or return process and sent to a recipient, in lieu of such original paper check, a substitute check or, by agreement, information relating to the original check (including data taken from the [magnetic ink character recognition] line of the original check or an electronic image of the original check), whether with or without subsequent delivery of the original paper check.” 12 USCS §5002(18) (2005).

⁸ Federal Reserve, *Check Clearing for the 21st Century Act*, at <http://www.federalreserve.gov/paymentsystems/truncation/default.htm> (last updated Nov. 16, 2004); *see also* Check Clearing for the 21st Century Act, H.R. 1474, 108th Cong. (2003) (enacted). To facilitate check truncation by authorizing substitute checks, to foster innovation in the check collection system without mandating receipt of checks in electronic form, and to improve the overall efficiency of the Nation’s payment system, and for other purposes. *Id.*

⁹ Check 21 defines “substitute check” as a “paper reproduction of the original check that (A) contains an image of the front and back of the original check; (B) bears a magnetic ink character recognition line (“MICR line”) of the original check, except as provided under generally applicable industry standards for substitute checks to facilitate the processing of substitute checks; (C) conforms, in paper stock, dimension, and otherwise, with generally applicable industry standards for substitute checks, and (D) is suitable for automated processing in the same manner as the original check.” 12 U.C.S.C. §5002(16) (2005).

image transmittal, or EIT),¹⁰ and to deliver substitute checks to banks that want to continue receiving paper checks.¹¹

The legislation puts banks on the road to eliminating paper in favor of fully electronic transactions since Check 21 allows banks to substitute electronic images of cancelled checks for the actual pieces of paper. The long-term benefit of this legislation to financial institutions will undoubtedly be a reduced reliance on the existing courier system, resulting in both a general reduction in operating costs and acceleration in forward presentment, posting, and return notification.¹² However, while Congress may think they are insulating the check processing system from problems like terrorism and inclement weather, this Note proposes that Check 21 could create equally devastating problems because of the system's inability to handle new fraudulent schemes present in an electronic world.

Any time an original document, like a check, is destroyed there is the risk that the secondary document will not be of similar quality as the primary document. Since Check 21 allows for the original paper check to be destroyed, critical information such as handwriting analysis and fingerprint analysis is lost or ineffective, which makes check fraud much harder to prove.¹³ Likewise, security features embedded in paper checks will not survive imaging. An analysis of security features of paper checks shows that forensics has been successful in detecting check fraud.¹⁴

¹⁰ Malmfeldt, *supra* note 3, at 213.

¹¹ H.R. 1474 § 13.

¹² See CONSUMERS UNION, *Questions and Answers About the Check Clearing for the 21st Century Act "Check 21"*, at <http://www.consumersunion.org/finance/ckclear1002.htm> (updated July 27, 2004).

¹³ *See id.*

¹⁴ BankersOnline, *Check 21 Effects on Fraud*, available at <http://www.bankersonline.com/check21> (last visited Mar. 22, 2005).

Despite the issues that arise from not being able to obtain the paper checks, there are some aspects of fraud protection that may be enhanced by the use of new security features currently being tested to adapt to substitute checks.¹⁵ Even still, new fraudulent schemes not yet contemplated will likely emerge.¹⁶ Therefore, this Note suggests that even though Check 21 may make payments more efficient and cost effective, the safety of electronic payments and substitute checks is jeopardized because the electronic replacement of the original paper check loses critical security features making the financial institutions and customers more vulnerable to devastating fraudulent schemes.

II. STATUTORY SCHEME OF CHECK 21

The goals of Check 21 are to “facilitate check truncation by authorizing substitute checks, to foster innovation in the check collection system without mandating receipt of checks in electronic form, and to improve the overall efficiency of the Nation’s payments system.”¹⁷ An example of inefficiency in the current banking system is the substantial delay retail bank depositors have encountered in gaining access to the proceeds of checks that are in the process of collection.¹⁸ The reason for the long delays is the inefficient methods banks use to process return items.¹⁹

A. Traditional Check Collection Process

The check collection system involves the physical transportation of checks from bank to

¹⁵ See BankersOnline, *supra* note 14.

¹⁶ *Id.*

¹⁷ Stephen C. Veltri, et al., *Survey—Uniform Commercial Code*, 58 BUS. LAW. 1575, 1577 (2003).

¹⁸ Emma Coleman Jordan, *Ending the Floating Check Game: The Policy Arguments For Delayed Availability Reform*, 36 HASTINGS L.J. 515 (1985).

¹⁹ *Id.*

bank, and on to the customer via truck, courier, air, or other means.²⁰ When a check is deposited with a “depository bank”,²¹ that bank must send the check, often through a “collecting bank”,²² to the “payor bank”²³ for presentment.²⁴ “If the payor bank . . . pays the check, the payor bank transports the check further to the drawer of the check, its customer.”²⁵ “If the payor bank does not pay the check, the check [is returned back] through the check collection system . . . to the initial depositor.”²⁶ “The journey of an individual check can involve thousands of miles, multiple financial institutions, and considerable expense to banks and their customers.”²⁷ The cost to process a paper check is 4.5 cents per item, whereas, electronic check processing costs 1.3 cents per item.²⁸

Additionally, the long delays leave banks uninformed about whether an item has been accepted or rejected by the payor bank; as a result, banks often delay the availability of uncollected funds for four to twenty-one banking days.²⁹ Check 21 aims to avoid the necessity

²⁰ Glen R. McCluskey, *Electronic Check Transactions: What Law Governs?*, 58 BENCH & B. MINN 25 (2001) at <http://www2.mnbar.org/benchandbar/2001/oct01/electronic-check.htm> (Oct. 2001).

²¹ Check 21 defines “depository bank” as “(i) the first bank to which a check is transferred, even if such bank is also the paying bank or the payee or (ii) a bank to which a check is transferred for deposit in an account at such bank, even if the check is physically received and indorsed first by another bank.” 12 U.S.C.S. § 5002(3)(B) (2005).

²² Check 21 defines “collecting bank” as “any bank handling a check for collection except the paying bank.” 12 U.S.C.S. § 5002(3)(A) (2005).

²³ Check 21 defines “paying bank” as “(i) the bank by which a check is payable, unless the check is payable at or through another bank and is sent to the other bank for payment or collection, or (ii) the bank at or through which a check is payable and to which the check is sent for payment or collection.” 12 U.S.C.S. § 5002(3)(C) (2005).

²⁴ Thomas C. Baxter Jr. et al., *Revised Articles 3 and 4 of the UCC: Will New York Say Nix?*, 114 BANKING L.J. 219 (1997).

²⁵ *Id.* at 220.

²⁶ *Id.*

²⁷ *Id.*

²⁸ Koenigsberg & Smith, *supra* note 2.

²⁹ Jordan, *supra* note 18, at 515-16.

of original paper checks being physically transported all over the country, and instead to facilitate the electronic transfer of an image, or other information about a check.

B. New Era in Check Collection

Under Check 21, substitute checks would be delivered to banks that do not accept checks electronically. Banks could “truncate a check at the point-of-deposit, transmit the check images to a central bank, and eliminate the need for daily transportation of the paper.”³⁰ Check 21 does not require check truncation, but does promote voluntary agreements between banks to accept electronic versions of checks in the check collection and clearing process.³¹

In a Check 21 environment, when the original check is removed from the process and reproduced to electronic image only the electronic information of the check will be transmitted to the next recipient in the collection process.³² The payor or other collecting bank must agree to accept the image.³³ Since Check 21 does not directly regulate electronic check imaging or the transfer of images, if any bank along the collection path has not agreed to accept the electronic image, the transferring bank must send a substitute check to the payor bank with information from the MICR line.³⁴ “If the drawer or any bank downstream in the collection process from the entity that truncated the check does not agree to truncation, Check 21 is triggered and specifies that the party who has not agreed be entitled only to a “substitute check,” and not the original check.”³⁵ In effect, since depository banks no longer need an EIT agreement with the collecting

³⁰ McCluskey, *supra* note 20, at 25.

³¹ National Consumer Law Center, *New Check 21 Act Effective October 28, 2004: Banks No Longer Will Return Original Cancelled Checks*, at <http://www.nclc.org/initiatives/check21.shtml> (last visited Feb. 6, 2006).

³² *Id.*

³³ *Id.*

³⁴ *Id.*

bank, and the collecting banks no longer needs an EIT agreement with the paying banks, Check 21 makes it feasible for all banks to now utilize electronic image transmittal.³⁶

C. Example to Illustrate the Effect of Check 21 in the Collection Process

Under the old banking system if a depository bank in Maine receives a check drawn from a bank in Texas, the depository bank in Maine had to present the original paper check absent an agreement allowing check truncation, even if the bank in Texas has agreements to accept checks electronically with other banks in the collection chain for that same check.

Now, with the enactment of Check 21, the Texas bank could transfer check information electronically to a collecting bank in Maine with which it had an agreement to do so. The collecting bank in Maine could then create a substitute check to present to the Maine collecting bank. The Maine paying bank would be required to accept the substitute check so long as the substitute check meets all the legal equivalence requirements of a substitute check.

Thus, the original paper check no longer needs to be processed and transported across the country. Check 21 does not require any bank to use electronic image transmittal, however, as the above example illustrates, any bank that requires an original check now must accept a substitute check in satisfaction of the original check.³⁷

³⁵ National Consumer Law Center, *supra* note 31.

³⁶ Malmfeldt, *supra* note 3, at 212-14.

³⁷ See National Consumer Law Center, *supra* note 31.

III. CONFLICTS OF LAW

Though originally governed by common law,³⁸ Articles 3 and 4 of the Uniform Commercial Code (UCC) now regulate paper check transactions.³⁹ Despite the UCC's tradition of longstanding acceptance of checks in "non-original form"⁴⁰ the UCC does not govern electronically converted checks; rather, electronically converted checks are the concern of The National Automated Check Clearinghouse (NACHA) Operating Rules and Regulation E.⁴¹ Check 21 aims to fill the gaps between the UCC, NACHA, and Regulation E.

A. The UCC and Paper Check Transactions

The three central questions addressed under the state law include: 1) "whether a check is 'properly payable;' 2) whether the drawer has a right to receive cancelled checks; and 3) whether the drawer has the right to the original check or to a copy."⁴² Under the UCC a paying bank incurs liability to the drawer if they dishonor a check that is "properly payable."⁴³ In the event of a cancelled check, most versions of Article 4 of the UCC provide that a bank must "either return, or make available to the customer the items paid, or provide information in the statement of account sufficient to allow the customer reasonably to identify the items paid."⁴⁴

³⁸ Edward L. Rubin, *Uniformity, Regulation, And The Federalization of State Law: Some Lessons From the Payment System*, 49 OHIO ST. L.J. 1251 (1989).

³⁹ McCluskey, *supra* note 20, at 25.

⁴⁰ *See* Malmfeldt, *supra* note 3, at 213.

⁴¹ "Regulation E is the set of federal regulations that implements the Electronic Funds Transfer Act." McCluskey, *supra* note 20, at 25.

⁴² Brian W. Smith et al., *Check Clearing E-Processes Move Forward: While Proposed New Law Is Pending, Contracts and Product Features Can Minimize Risks*, N.Y.L.J. (June 9, 2003), available at <http://www.mayerbrownrowe.com/publications/article.asp?id=966&nid=6> (last visited Feb. 8, 2006).

⁴³ *Id.*

As to whether the drawer has a right to the original check, most jurisdictions hold that “[a] customer may request an item from the bank that paid the item, and that bank must provide in a reasonable time either the item or, if the item has been destroyed or is not otherwise obtainable, a legitimate copy of the item.”⁴⁵ In at least three states (New York, Massachusetts, and Maryland) paying banks must at “least offer to provide customers with the original cancelled checks.”⁴⁶

B. NACHA, Regulation E, and Electronic Check Conversion

Check conversion came into existence in March 2002 as a process that allowed billers to read data from a check and convert it to electronic payment.⁴⁷ “Electronic check conversion is a function of the Automated Check Clearing House (ACH) Network.”⁴⁸ The National Automated Check Clearinghouse Association (NACHA) Operating Rules and Regulation E⁴⁹ govern ACH.⁵⁰ The rules set forth by the NACHA that govern ACH transactions derive from the NACHA’s collaboration with the Federal Reserve’s Board of Governors.⁵¹

One difference between the UCC rules, and the NACHA’s rules, is that the NACHA’s rules governing check truncation require “a Merchant Payee to provide a Drawer with a notice that states that the Merchant Payee’s receipt of the Drawer’s check constitutes the Drawer’s

⁴⁴ Smith et al., *supra* note 42 (citing U.C.C. §4-406 (2005)).

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Koenigsberg & Smith, *supra* note 2.

⁴⁸ McCluskey, *supra* note 20, at 25.

⁴⁹ *Id.* at 26.

⁵⁰ “An ACH transaction is ‘off-line,’ meaning that funds are not immediately withdrawn from the consumer’s checking [ac]count at the time of the transaction. There is still a ‘float’ of about two days.” *Id.*

⁵¹ *See id.*

authorization of a debit entry to the drawer's account."⁵² Then "the Bank of First Deposit must warrant to the paying bank that the proper authorization of the Drawer [was] obtained," which means the paying bank is no longer very concerned with whether an item is properly payable.⁵³ Also, the NACHA requires banks "to inform customers of the length of time the bank intends to keep the original cancelled check."⁵⁴

C. Check 21 Preempts Inconsistent State and Federal Law

Electronic check conversion soared in popularity—accounting for 60 million check payments made in the third quarter of 2003,⁵⁵ but there remained impediments in the system that suppressed the expansion of check conversion. For example, prior to the enactment of Check 21, for checks to be truncated and presented for payment via the ACH Network, the NACHA rules required that the receiving party inform the check writer of the receiving parties' truncation policy, and the consumer must be offered the option to authorize the truncation in writing or to opt-out.⁵⁶ In a Check 21 environment, banks no longer need consumer authorization to truncate checks. However, while some barriers have been removed under Check 21, exposed conflicts in the governing law are likely to create new tribulations.

One such quandary will likely be the expanded authority of the Federal Reserve Board created in Check 21 to regulate issues and parties outside the banking system. Ever since its inception in 1913, the Federal Reserve System (FRS) has supervised the "entire banking

⁵² Smith et al., *supra* note 42, at 2.

⁵³ *Id.* at 2-3.

⁵⁴ *Id.* at 3.

⁵⁵ Koenigsberg & Smith, *supra* note 2.

⁵⁶ McCluskey, *supra* note 20, at 25.

industry.”⁵⁷ Individual state banks had to choose to join the FRS, thereby becoming a member bank, before the individual state banks were placed under the regulation of the FRS.⁵⁸ However, Check 21 creates a shift away from state law to federal regulation, which could cause integration problems with the UCC.

Since Check 21 is intended to preempt inconsistent federal or state law, including the UCC,⁵⁹ federal or state law will continue to apply only to the extent that it is not inconsistent with Check 21.⁶⁰ “A new legal regime of warranties, indemnification provisions and expedited recredit rights for consumers is designed to provide a new legal environment with consequences largely equivalent to current law, but with some concessions to those seeking a more ‘fair balance’ among competing interests.”⁶¹ Yet such a ‘fair balance’ doesn’t seem attainable where the expedited recredit⁶² rules for consumers under Check 21 could significantly shift the risk of

⁵⁷ Malmfeldt, *supra* note 3, at 211.

⁵⁸ *Id.*

⁵⁹ H.R. 1474; *see also* National Consumer Law Center, *supra* note 31.

⁶⁰ National Consumer Law Center, *supra* note 31.

⁶¹ Alvin C. Harrell, *Electronic Checks*, 55 CONSUMERS FIN. L.Q. REP. 283, 288 (2001); “Substitute Check Warranties: A bank that transfers, presents, or returns a substitute check and receives consideration for the check warrants, as a matter of law, to the transferee, any subsequent collecting or returning bank, the drawee, the drawer, the payee, the depositor, and any endorser (regardless of whether the warrantee receives the substitute check or another paper or electronic form of substitute check or original check)—that (1) the substitute check meets all the requirements for legal equivalency under section 4(b); and (2) no depository bank, drawee, drawer, or endorser will receive presentment or return of the substitute check, the original check, or a copy or other paper or electronic version of the substitute check or original check such that the bank, drawee, drawer, or endorser will be asked to make a payment based on a check that the bank, drawee, drawer, or endorser has already paid.” 12 U.S.C. §5004 (2005); “Indemnity: A reconverting bank and each bank that subsequently transfers, presents, or returns a substitute check in any electronic or paper form, and receives consideration for such transfer, presentment, or return shall indemnify the transferee, any subsequent collecting or returning bank, the depository bank, the drawee, drawer, the payee, the depositor, or the endorser, up to the amount described in subsections (b) and (c) as applicable, to the extent of any loss incurred by any recipient of a substitute check if that loss occurred due to the receipt of a substitute check instead of the original check.” 12 U.S.C. §5005(a) (2005).

⁶² A consumer may make a claim for expedited recredit from the bank that holds the account of the consumer with respect to a substitute check, if the consumer asserts in good faith that “(A) the bank charged the consumer’s account for a substitute check that was provided to the consumer, (B) either (i) the check was not properly charged to the consumer’s account, or (ii) the consumer has a warranty claim with respect to such substitute check, (C) the

fraud losses to banks concurrently reducing consumer incentive to prevent such loss.⁶³

IV. CHECK FRAUD

Each year losses from check fraud exceed \$20 billion, and studies indicate an expected rate of increase of 2.5% each year.⁶⁴ Check fraud is not limited to one type of fraudulent scheme. “[C]hecks may be (i) altered, either as to the payee or the amount;⁶⁵ (ii) counterfeited,⁶⁶ (iii) forged,⁶⁷ either as to the drawer’s signature or an indorsement; (iv) or drawn on closed accounts.”⁶⁸ Check fraud has increased in the United States in large part because of the “proliferation of affordable computer equipment and software used to produce fraudulent checks; the availability of laser printers, scanners, and photocopiers used to duplicate and print fraudulent checks; and the ease with which account information can be obtained from customers.”⁶⁹

A. Check Fraud Losses Under the UCC

Articles 3 and 4 of the UCC allocate liability for check fraud losses between the depository bank, collecting banks, the payor bank, and the individual whose account was

consumer suffered a resulting loss, and (D) the production of the original check or a better copy of the original check is necessary to determine the validity of any claim described in subparagraph (B).” 12 U.S.C. §5006(a) (2005).

⁶³ H.R. 1474.

⁶⁴ Ryan Stai, *Counteracting Theft and Fraud: The Applicability of RICO to Organized Retail Crime*, 88 MINN. L. REV. 1391, 1394 (2004) (citations omitted).

⁶⁵ “A thief obtains a legitimate check... and uses chemicals or other means to erase the amount of the check or the payee name so that new information can be entered.” Am. Bar Ass’n: Subcomm. on Payments, *Deterring Check Fraud: The Model Positive Pay Services Agreement And Commentary*, 54 BUS. LAW 637, 639 (1999).

⁶⁶ Counterfeit is a term “used to describe checks that are manufactured by the perpetrator of the fraud and are designed to imitate genuine checks of the victim of the fraud.” *Id.*

⁶⁷ Forged checks “are written on genuine checks belonging to the account holder victim of the fraud.” *Id.*

⁶⁸ Closed account fraud occurs “when the criminal deposits a check drawn on a closed account knowing that he or she will be able to withdraw the funds before the check is returned.” *Id.*

⁶⁹ *Id.* at 638.

affected.⁷⁰ When the bank pays a check that is not “properly payable,” they are liable to the customer.⁷¹ However, the liability shifts from the payor bank to the bank’s customer if (i) the customer’s failure to exercise ordinary care substantially contributes to the forgery or alteration, (ii) the customer fails to exercise reasonable promptness in discovering and reporting the alteration or unauthorized signature, (iii) the perpetrator of the fraud is an employee of the customer, or (iv) there is imposter fraud.⁷² On the other hand, if the payor bank’s customer is liable under UCC sections 3-404 or 3-405, and the bank has failed to exercise ordinary care, liability may be apportioned under these sections between the bank and the customer.⁷³ “[A] bank and its customers may agree to vary the liability rules under the UCC.”⁷⁴

B. Losses under Check 21

Banks that receive substitute checks created by another bank would make the “substitute check warranties when [the receiving bank] delivers that item for presentment, collection, or return or provided that item to its customer[s].”⁷⁵ In other words, if a bank receives consideration for a substitute check then that bank is responsible for “indemnifying any person that suffers a loss due to the receipt of a substitute check instead of the original check.”⁷⁶ The expedited

⁷⁰ Am. Bar. Ass’n: Subcomm. on Payments, *supra* note 65, at 639-40.

⁷¹ *Id.* at 640. A check is properly payable if the account holder has authorized payment and the payment does not violate any agreement between the account holder and the bank. *Id.*

⁷² If a fraudulent imposter induces the issuer of a check to issue the check by impersonating the payee or its agent, an indorsement in the name of the payee by any person will be effective in favor of the person who in good faith pays the instrument or takes it for value or collection. U.C.C. §3-404(a) (2005).

⁷³ U.C.C. §§3-404, 3-405 (2005).

⁷⁴ Am. Bar. Ass’n: Subcomm. on Payments, *supra* note 65; *see also* H.R. 1474.

⁷⁵ Board of Governors of the Federal Reserve System, Availability of Funds and Collection of Checks, *available at* <http://www.federalreserve.gov/BoardDocs/Press/bcreg/2003/20031222/attachment.pdf> (last visited Feb. 17, 2006) (proposed Dec. 22, 2003) (to be codified at 12 C.F.R. pt. 229).

⁷⁶ *Id.*

recredit to consumers set out in Check 21 applies to the banks that provide substitute checks to consumers where those consumers incurred a loss as a result of receiving a substitute check instead of the original paper check.⁷⁷ Consequently, in cases where substitute checks are fraudulently reproduced it is the banks that stand to suffer great losses.

C. Positive Pay Services

Many banks offer their customers “positive pay services,” whereby “the drawer of a check delivers to its bank a ‘check issue report’ of all checks written over a particular period of time...”⁷⁸ Upon presentment of the check issue report, “the bank will provisionally settle for the checks and compare each check to the information on the check issue report.”⁷⁹ “Positive pay is useful for detecting counterfeit checks and unauthorized checks when the drawing of the check has not been authorized or the amount of the check has been altered.”⁸⁰ However, the current positive pay process is “limited to a comparison of the check number and amount,” therefore, its ability to detect fraud is narrow in scope.⁸¹

Typically, when customers receive checks from their bank, the checks are encoded with the payor bank’s routing number and the customer’s account number.⁸² When the depository bank receives a check, they encode the amount of each check, adding to the routing number and customer account number already encoded.⁸³

The information encoded on a check, which appears on the bottom of the check, is

⁷⁷ 12 U.S.C. §5006(a) (2005).

⁷⁸ Am. Bar Ass’n: Subcomm. on Payments, *supra* note 65, at 644.

⁷⁹ *Id.*

⁸⁰ *Id.* at 645.

⁸¹ *Id.* at 646.

⁸² *Id.* at 647.

⁸³ *Id.*

referred to as MICR line information.... Check processing systems rely on the check's MICR line to identify the bank on which the check is drawn, the amount to be debited, and the amount of the debit.⁸⁴

“When a check is truncated” only the information encoded on the MIRC line of the check is sent electronically to the payor bank thereby “limit[ing] the information that can be used in the positive pay process.”⁸⁵ “If the original check is never returned to the payor bank. . . the only information that will be available for the positive pay comparison will be the electronic information received by the payor bank, namely, the account number, check number, and check amount.”⁸⁶ If the payor bank needs to obtain the original check to obtain information other than the MICR line information such as the payee name or drawer's signature, the original will not be available.⁸⁷

Technologies needed to accommodate Check 21 have evolved to create more efficient check processing operations derived from the information encoded on the checks. With the passage of Check 21, the image of the entire check (front and back) will travel from the depository bank to the payor bank, rather than the more limited information contained within the MICR line. Still, despite significant technological advancements to electronic imaging of checks, current detection of check fraud remains based on the reification in a tangible check with certain physical attributes.

V. LEGAL ANALYSIS

Substitute checks are designed to be “the legal equivalent of the original check for all purposes, including any provision of any Federal or State law, and for all persons if it satisfies

⁸⁴ Am. Bar Ass'n: Subcomm. on Payments, *supra* note 65, at 647.

⁸⁵ *Id.* at 647-48.

⁸⁶ *Id.* at 648.

⁸⁷ *Id.*

three requirements.”⁸⁸ 1) The substitute check “must accurately represent all of the information on the front and back of the original check as of the time the original check was truncated;”⁸⁹ 2) The substitute check “must contain a legend stating: This is a legal copy of your check. You can use it the same way you would use the original check;”⁹⁰ 3) “The bank transferring the [substitute check] must provide the substitute check warranties specified in the Act.”⁹¹ The American National Standards Institute dictates the placement of the legend, but banks are permitted to develop industry standards relating to other characteristics of substitute checks.⁹²

A. Substitute Checks Lose Forensic Evidence

Of critical importance is the fact that substitute checks will not reproduce the color, or background design of the original check.⁹³ Consequently, in check fraud cases, handwriting experts cannot examine for pressure points on the substitute check.⁹⁴ The loss of handwriting analysis is unfortunate because a person’s “written signature is regarded as the primary means of identifying the signer of a written document, based on the implicit assumption that a person’s normal signature changes slowly and is very difficult to erase, alter, or forge without detection.”⁹⁵ After all, the primary purpose for having a person’s signature on a check is to

⁸⁸ National Consumer Law Center, *supra* note 31 (citation omitted).

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ R.R. Jueneman & R.J. Robertson, Jr., *Biometrics and Digital Signatures in Electronic Commerce*, 38 JURIMETRICS 427 (1998); *see also* Christopher B. Woods, *Commercial Law: Determining Repugnancy in an Electronic Age: Excluded Transactions Under Electronic Writing and Signature Legislation*, 52 Okla. L.Rev. 411, 425 (1999). “The evidentiary function was the principle reason for enacting an Act For Prevention of Frauds & Perjury, commonly known as the original Statute of Frauds.” *Id.*

establish evidentiary significance.⁹⁶

When a person signs a written document, e.g. a check, that person's signature provides reliable evidence that the person assented to the terms in the written document, thereby authenticating the document.⁹⁷ The identity of the person signing the document is also reliable because of the distinctness of each person's signature.⁹⁸ Each signature represents a unique set of physical attributes, which manifest in shape, speed, stroke order, pen pressure, and timing information during signing.⁹⁹ “[M]anual (ink) signature[s] on paper [are] ideal, because of the difficulty either in mechanically reproducing the signature..., or in changing the pre-printed text on the same physical piece of paper.”¹⁰⁰ Destroying the original document eliminates the very evidence needed to detect fraud via handwriting analysis making it more difficult to prosecute check fraud crimes in the future.¹⁰¹ Moreover, the electronic form of a check, which only includes the information on the MICR line, passed between the separate banks under Check 21 is repugnant to the legal formalities that have governed banking transactions since the inception of written checks.

Handwriting analysis is not the only critical security feature lost under Check 21. Other fraud detection features, such as watermarks, toner anchorage, and chemical reactive paper, and

⁹⁶ Woods, *supra* note 95, at 430.

⁹⁷ *See id.* at 425.

⁹⁸ *See id.*

⁹⁹ *See id.* at 432.

¹⁰⁰ Adam White Scoville, *Clear Signatures: Obscure Signs*, 17 CARDOZO ARTS & ENT. L.J. 345, 357 (1999).

¹⁰¹ Frank W. Abagnale et al., *White Paper*, at <http://www.abagnale.com/pdf/Check21andFraudWhitepaper.pdf> (last visited March 23, 2005).

fingerprinting will be rendered useless. Our country has been using biometrics¹⁰² since 1903, and the most common form used by law enforcement is fingerprinting.¹⁰³ Recently, some states acquired on-site fingerprinting¹⁰⁴ implemented in banks, requiring non-account holders to undergo fingerprinting to cash checks.¹⁰⁵ On-site fingerprint analysis gives law enforcement officials some information about a customer's identity; with the idea that criminals will be deterred from committing the fraud when they know there is direct evidence linking them to the crime.¹⁰⁶

The process of on-site fingerprinting may raise constitutional issues,¹⁰⁷ but those states that have adopted the process have seen a 42 percent reduction in check fraud.¹⁰⁸ Check 21 was adopted before on-site fingerprinting was implemented on a large scale, but despite the recent success in deterring check fraud as a result of on-site fingerprinting the process is now a nullity. Under Check 21, on-site fingerprinting, like handwriting analysis, will no longer be useful since

¹⁰² Biometrics is the identification of criminals based on physical characteristics. Patrick J. Waltz, Comment: *On-site Fingerprinting in the Banking Industry: Inconvenience or Invasion of Privacy*, 16 J. MARSHAL J. COMPUTER & INFO. L. 597, 605 (1998). Biometrics includes fingerprint imaging, voice recognition, retina scanning, facial recognition, and PenOp. Christopher B. Woods, Comment: *Commercial Law: Determining Repugnancy in an Electronic Age: Excluded Transactions Under Electronic Writing and Signature Legislation*, 52 OKLA. L. REV. 411, 417 (1999).

¹⁰³ Waltz, *supra* note 102, at 605.

¹⁰⁴ On-site fingerprinting is a two step process: First, the customer is asked to place his thumb into an inkless dye, then onto the back of the check; second, the check is deposited against the account and then put on file at the bank where it will remain until fraud is suspected, in which case the check is turned over to law enforcement. *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 606.

¹⁰⁷ On-site fingerprinting has raised Fourth Amendment questions pertaining to unreasonable search and seizure, and invasion of privacy. *Id.* at 607. In *Katz v. United States*, the Court held that “the Fourth Amendment does not protect personal interests that are continuously exposed to the public eye.” *Id.* at 609. Therefore, an argument can be made that an individual does not have a reasonable expectation of privacy in their fingerprints. *Id.* at 610. Additionally, in *Thom v. New York Stock Exchange*, the Court held that “fingerprinting was well within the state’s legislative power to reduce thefts, embezzlement, and other crimes.” *Id.* at 611. Since on-site fingerprinting is a security measure, and the banking industry is highly vulnerable to criminal activity, under *Thom*, on-site fingerprinting in the banking industry is justified. *Id.*

¹⁰⁸ *Id.* at 606.

the original check will be destroyed once it has been electronically converted to electronic image.

B. New Fraudulent Schemes Emerge and are Undetected

Surely one would think that if the government is willing to set aside reliable methods of detecting check fraud then the government must have in place effective procedures to ensure costumers a safe banking environment. Yet, no such procedures or safeguards have been announced. In fact, this transition to electronic banking comes at a time when cybercrime¹⁰⁹ is one of the most challenging issues facing law enforcement. In the financial industry, “phishing” schemes have recently emerged as the chief threat to consumers.¹¹⁰

Phishing schemes are the work of identity thieves. A typical phishing scheme involves an email sent by the thief to his or her target that appears to come from a financial company¹¹¹ where the targeted individual has a preexisting relationship.¹¹² The email message directs the targeted individual to update his or her billing information, and contains links to look-alike websites that are nearly indistinguishable from the real financial institutions website.¹¹³ The phony website asks for the targeted individual’s card numbers, Social Security numbers, passwords, and other information.¹¹⁴ The thieves then use the information they obtain to

¹⁰⁹ Cybercrime refers to fraudulent crimes committed via the Internet. J. Howard Beales Symposium, *The Patriot Act, Consumer Privacy, and Cybercrime*, 5 N.C.J.L. & TECH. 1, 2 (2003).

¹¹⁰ “The potential for mass production of fraud is staggering . . . In the last 12 months, 57 million US adults received phishing emails, of which 11 million remember clicking on the provided links, 1.78 million provided passwords and other sensitive personal information. In total, the scams resulted in fraud losses of \$2.4 billion.” Abagnale, *supra* note 101.

¹¹¹ *Id.* Discover, Citibank, Bank of America, and Best-Buy have all been targeted by phishing schemes because of their large number of customer accounts.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

purchase goods at the expense of their victims.¹¹⁵ The thieves can also receive customer's monthly statements and check images.¹¹⁶ Using the information the thieves obtain from their victims, the thieves create high-quality counterfeit checks using the scanned signature.¹¹⁷

The ability of online hackers to create counterfeit checks using scanned images is a prime example of how not having the original document creates risk for the bank. "Once checks have been converted to electronic image... it will be very difficult to determine a counterfeit check from an authentic one, or even an altered check from a counterfeit, [and] often the only way to differentiate a counterfeit from an authentic or an altered check from a counterfeit is by detailed examination of the actual item."¹¹⁸

The limitation of check readers becomes significant in situations like those just described making fraud detection harder to spot.

[E]xisting check readers can only "see" at resolutions approaching 240 dpi [(dots per inch)]... [while] consumer grade printers and copiers operate at 600 dpi [(dots per inch)] or greater. [Therefore,] existing [check] readers... are inherently unable to distinguish between the appearance of an original item or a copy reproduced [on such equipment.]¹¹⁹

The general rule is that to create an accurate reproduction the copying resolution needs to be two

¹¹⁵ Abagnale, *supra* note 101.

¹¹⁶ Theresa Carey, *Experts Fear Check 21 Could Lead to Mass Fraud*, at <http://www.eweek.com/article2/0,1759,1683510,00.asp> (last visited Mar. 23, 2005). (The ideas mentioned in the Article by Carey, and referenced to in this Note, are those originating from Frank W. Abagnale, Ori Eisen and Elazar Katz in their collective piece entitled "White Paper"). *See also* Abagnale, *supra* note 101.

¹¹⁷ Abagnale, *supra* note 101.

¹¹⁸ Jodi Pratt, *The Unanticipated Risk Implications of Check 21*, at http://www.bai.org/check21/pop_content.asp?path=pdf%2Funanticipated%5Frisk%5FCarreker%2Epdf (last visited Mar. 23, 2005).

¹¹⁹ Dan Thaxton & Frank Abagnale, *Check 21 and Image Security: A review of the implications associated with identifying image survivable security features in response to recent Check 21 legislation*, at http://www.epaynetwork.com/infocfiles/EPN_Check21whitepaper.pdf (last viewed Mar. 27, 2005).

times that of the original item.¹²⁰ Otherwise, copied items can easily be misinterpreted as an original item.¹²¹

This problem illustrates that significant work needs to be done to develop new forms of image-survivable security features¹²² that are otherwise lost when destroying the original paper check. Presently, though, no such security features exist.¹²³ It is imperative that financial institutions take the appropriate steps to secure these aspects of their systems, but where no such security features have been put in place the premature passage of Check 21 makes consumers vulnerable to these new fraudulent schemes.

C. Online Fraudsters Remain Unidentifiable

Equally as problematic as fraud detection is the recognition that Internet fraud is a moving target, and financial institutions are not equipped to deal with the large-scale attacks ubiquitous with Internet fraud.¹²⁴ Online thieves are having a field day taking advantage of vulnerabilities to online systems: not only do law enforcement officers have tremendous difficulty identifying and prosecuting online thieves, but the online thieves can commit crimes “on a far broader scale than their real world counterparts.”¹²⁵ Online “fraudsters” can conceal their identity and physical location, even route their communications to several different

¹²⁰ Thaxton & Abagnale, *supra* note 119.

¹²¹ *Id.*

¹²² “Image-survivable security [features]...describes the security devices employed on an original item that bridge effectively into the electronic item.” *Id.*

¹²³ *Id.* at 2. The article suggests that checks over \$400 should not be converted from paper to electronic image due to the high risk of fraud, and suggests that “financial institutions ... use high security checks with eight or more features, including true watermarks in the paper, thermochromatic ink, and chemically sensitive paper or ink to aid in the detection of fraud at the point of acceptance.” *Id.* These methods remain effective at the point of acceptance because they are easy to spot with the human eye. *Id.*

¹²⁴ See Abagnale, *supra* note 101; see also Susan W. Brenner, *Cybercrime Metrics: Old Wine, New Bottles?*, 9 VA. J.L. & TECH. 13 (2004).

¹²⁵ Brenner, *supra* note 124.

countries, making it nearly impossible for law enforcement agencies to find the fraudsters.¹²⁶

“[I]n automated crime there may either be no crime scene or there may be many crime scenes, with pieces of the offense scattered through cyberspace,”¹²⁷ making it nearly impossible for investigators to know where or how the person’s identity was compromised.¹²⁸

This again raises concern as to evidence in a Check 21 environment where, for the most part, the evidence is digital and perhaps even intangible.¹²⁹ Law enforcement is not yet adequately trained nor equipped to analyze digital evidence.¹³⁰ Due to the evasive nature of digital evidence, which can be easily altered, erased, or hidden, specialists are needed to restore, or find the digital evidence requiring many hours of processing computers and storage media.¹³¹ Admittedly, law enforcement will need to become adept at handling digital evidence, as it is the progression of the future. Nevertheless, to test out vulnerabilities in the banking industry, which is undoubtedly the case with the enactment of Check 21, at a time when the consequences are so great, should raise red flags for all financial institutions and customers alike.

VI. Institutional Regulations

The complexity of new problems leaving banking customers vulnerable to financial scams begs the question: what dictates whether new security procedures put in place by banks to protect their customer’s sensitive information during electronic image transmittal are reasonable?

¹²⁶ Brenner, *supra* note 124.

¹²⁷ *Id.*

¹²⁸ Pratt, *supra* note 118.

¹²⁹ Brenner, *supra* note 124.

¹³⁰ *Id.*

¹³¹ *Id.*

Check 21 does not answer this question, but the Federal Trade Commission (“FTC”)¹³² has taken up the issue in recent years. The FTC recognizes that security breaches in large companies can have harmful consequences to customers; therefore, the FTC proposes a flexible information security program to protect consumers’ information without “imposing rigid technologically-specific standards as a remedy.”¹³³ The FTC bases its proposal on the philosophy that a more rigid standard might give financial institutions a false sense of security.¹³⁴ The FTC even goes as far as to admit that although certain technologies such as intrusion detection or network architectures may be desirable, “there is no magic bullet that will provide the appropriate level of security for all systems.”¹³⁵

The lack of a concrete solution correlates to the evasiveness of online scams, rapid changes in technology, and threats to those technological systems, thereby making security an ongoing process.¹³⁶ On May 23, 2003, the FTC enacted its own Safeguard Rules, which calls for financial institutions to implement comprehensive protections for consumer protection.¹³⁷ “Each institution must develop a written plan that takes into account its particular circumstances—its size and complexity, the nature and scope of its activities, and the sensitivity of the customer information it handles.”¹³⁸ According to the FTC, so long as companies “conduct periodic risk

¹³² The FTC is the nation’s chief consumer protection agency. J. Howard Beales Symposium, *supra* note 109.

¹³³ *Id.* at 27.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.* at 24.

¹³⁸ *Id.*

assessments and adjust their programs in light of what they find,”¹³⁹ companies are not in violation of the FTC’s Safeguard Rules simply by failing to adopt any one particular technology.

VII. CONCLUSION

With the introduction of imaging in a Check 21 environment, new fraudulent schemes are likely to get more intricate and harder to detect, as is illustrated with the recently emerging phishing schemes. An increase in fraud filters is necessary to compensate for lost paper-based features, and image enablement software needs to be sophisticated enough to spot potential fraud. Regardless, it is likely that without a paper check to inspect counterfeiters will exploit the inability of digital images and substitute checks to retain traditional security features, like forensics, as well as an institutions inability to capture certain types of forgeries and alterations.

Moreover, with the movement toward faceless transactions via the increased use of electronic checks in a Check 21 era the potential for devastating losses to financial institutions and customers is prevalent. Exacerbating the problem is the lack of uniformity in securing our technological systems, which makes it all the more difficult to determine which institutions acted reasonable, and which institutions breach their fiduciary duty to their customers. Before prosecutors can successfully battle this new era of check fraud cases, sure to become even more complex under Check 21, prosecutors must first be able to rely on evidence that is entirely electronic, and also be able to identify the wrongdoer. Until that time comes, thieves that exploit the vulnerabilities of electronic check transmittal will remain undetected, unidentifiable, and un-prosecutable.

¹³⁹ J. Howard Beales Symposium, *supra* note 109, at 27.