

CONFUSION AND CONVERGENCE IN CONSUMER PAYMENTS: IS COHERENCE IN ERROR RESOLUTION APPROPRIATE?

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INTRODUCTION

When Joe Consumer reaches the checkout at the grocery store, he has multiple ways to pay for his groceries. He can write a check and hand it to the cashier. This check, however, might get converted into an Automated Clearinghouse (ACH) transaction, which results in a funds transfer from his bank account. He might also use several different types of plastic to pay for his groceries—including a debit card, a credit card, or a prepaid gift card, perhaps issued by his own supermarket chain. For Joe Consumer, the methods of payment may appear quite similar in terms of how they are used and electronically processed, but the legal rules which govern each transaction vary. Joe Consumer might also pay for his groceries by shopping online. Perhaps he will pay his online grocery bill using his PayPal account. The rules which govern these transactions will also vary.

Does Joe Consumer know which rules govern each transaction? While there is no empirical research about this, it is hard to imagine that most consumers are aware of the differing rules that stem from each payment.¹

In the United States, Congress and federal regulators have attempted to foster innovation in the payments arena by regulating new payment methods after they have gained consumer acceptance.² Regulators often try to craft regulatory responses that are not burdensome to industry and are

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1. When the author teaches payment systems at her law school, she surveys her students to find out how much they know about error and fraud rules with respect to different consumer payment methods. Students typically are unaware of the varying rules and where they come from. Few students have read their deposit, debit, or credit card agreements.

2. Mark Furlletti, *The Laws, Regulations, and Industry Practices That Protect Consumers Who Use Electronic Payment Systems: Policy Considerations* 16 (Fed. Reserve Bank of Phila., Discussion Paper No. 05-16, 2005), available at <http://www.philadelphiafed.org/pcc/papers/2005/ConsumerProtection.pdf>; see also Roger W. Ferguson, Jr., Vice Chairman, Bd. of Governors of the Fed. Reserve Sys., Remarks at a Workshop on Promoting the Use of Electronic Payments (Oct. 11, 2000), available at <http://www.federalreserve.gov/BoardDocs/Speeches/2000/20001011.htm> (stating that officials should exercise restraint and not regulate new payment systems prematurely).

tailored to the specific aspects of particular payment systems. This has led to a consumer payments regime with different rules for different systems. To date, legislators and regulators have failed to enact a uniform approach to consumer payments.³

There are at least three distinct primary consumer payments regimes—credit cards, debit cards/electronic funds transfers, and checks—and they are each governed by differing regulatory regimes. As a result, their error resolution mechanisms, among other things, vary.⁴ At present, error resolution for checks is governed by Article 4 of the Uniform Commercial Code. If a consumer discovers an error with respect to a check, the bank's duty to rectify the error comes from U.C.C. section 4-401. A bank must only pay checks that are properly payable and bears responsibility for checks that are wrongfully honored. There is, however, no formal timeframe within which a bank must act. A consumer, on the other hand, must notify the bank with reasonable promptness about certain types of errors (which can be detected by reviewing her bank statement).⁵ This time limit can be specified by the terms of the account agreement between a consumer and his financial institution. Some banks give consumers one to two weeks to report errors, for example.

3. Ronald J. Mann, *Making Sense of Payments Policy in the Information Age*, 93 GEO. L.J. 633, 636–38 (2005); Furletti, *supra* note 2, at 15–16; *see, e.g.*, David L. Mengle, *Legal and Regulatory Reform in Electronic Payments: An Evaluation of Finality of Payment Rules 4* (Fed. Reserve Bank of Richmond, Working Paper No. 88-2, 1988), available at http://www.richmondfed.org/publications/economic_research/working_papers/pdfs/wp88-2.pdf (summarizing the patchwork of laws governing consumer electronic funds transfer). Regulators have, however, tried to provide consumer education on the differences between payment mechanisms. *See, e.g., Paper or Plastic?*, CONSUMER NEWS (FDIC, Washington, D.C.), Spring 2000, <http://www.fdic.gov/consumers/consumer/news/cnspr00/cvrstry.html>.

4. For checks, Articles 3, 4, and 4A of the U.C.C. govern check transactions. U.C.C. art. 3 (2005) (Negotiable Instruments); U.C.C. art. 4 (2005) (Bank Deposits and Collections); U.C.C. art. 4A (2005) (Funds Transfers). In terms of error resolution, U.C.C. section 4-401 sets forth a rule that a bank may only pay a check that is properly payable. To the extent that a check is paid which contains an alteration or forgery, the drawer has real defenses available as a grounds for non payment because it is not properly payable. *See* U.C.C. § 4-401 cmt. 1. Regulation E outlines detailed procedures that financial institutions must use for error resolution, including: informing consumers of the availability of error-resolution services, procedures, and timetables for investigating errors; the extent of the required investigation; and procedures that must be followed after the investigation is completed. For example, if the institution has not completed its investigation of an ACH E-Check transaction within ten days, it must provisionally recredit the consumer's account in the amount of the potential error and complete the investigation within forty-five days. Furletti, *supra* note 2, at 20; Mark Furletti & Stephen Smith, *The Laws, Regulations, and Industry Practices That Protect Consumers Who Use Electronic Payment Systems: Credit and Debit Cards* 23–24 (Fed. Reserve Bank of Phila., Discussion Paper No. 05-01, 2005), available at http://www.philadelphiafed.org/pcc/papers/2005/ConsumerProtectionPaper_CreditandDebitCard.pdf.

5. U.C.C. § 4-406.

Error resolution for funds transfers such as debit card transactions are governed by Federal Reserve Regulation E and the Electronic Fund Transfer Act (EFTA). Regulation E sets out a more detailed error resolution procedure. A consumer has sixty days after the transmission of a bank statement to alert a financial institution of an error. After that the institution has to act within a set timeframe, and if it cannot resolve an error within ten business days, it must provide a consumer with a provisional recredit. A bank must also complete its investigation within forty-five days.

Credit card error resolution is governed by Federal Reserve Regulation Z. The billing error resolution procedures for credit cards are quite similar to those for debit cards and funds transfers. In contrast, stored-value and prepaid cards offer no statutory error resolution procedures with the exception of certain types of payroll cards.

Some commentators have suggested that there is a great deal of consumer confusion surrounding new electronic payment methods.⁶ There has been, however, little research into consumer understanding of consumer protection laws as they apply to different payment methods or into whether differing regulation impacts consumer choice.⁷ At the same time, some preliminary facts suggest that consumers may indeed be confused by the patchwork of payment regulations governing the ways in which they pay and transact. At times, it is unclear whether consumers understand the differences in their legal or statutory rights arising from use of different payment methods.⁸ Scholars have also questioned the basis for maintaining the distinctions in legal rules for different payment systems.⁹

6. See Marianne Crowe, Scott Schuh & Joanna Stavins, *Consumer Behavior and Payment Choice: A Conference Summary* 7 (Fed. Reserve Bank of Boston, Discussion Paper No. 06-1, 2006), available at <http://www.bos.frb.org/economic/ppdp/2006/ppdp061.pdf>; Furletti & Smith, *supra* note 4, at 6 (summarizing other commentators).

7. Indeed, to date there has been little research into why consumers choose different payment methods. For an overview of recent literature, see Stacey L. Schreft, *How and Why Do Consumers Choose Their Payment Methods?* (Fed. Reserve Bank of Kansas City, Econ. Research Dep't, Research Working Paper No. 06-04, 2006), available at <http://www.kansascityfed.org/publicat/reswkpap/PDF/RWP06-04.pdf>.

8. The STAR Consumer Payments Usage Study, conducted by First Data Corporation, found that consumers use between two and four different payment types each month. As part of the study, consumers were asked about identity theft and fraud protections:

Overall, less than one-fifth of debit card users surveyed are aware of zero liability from any type of debit card losses. However, when asked about personal liability and exposure to fraudulent purchases, consumers were equally likely to expect zero liability from signature debit and PIN-secured debit purchases. Financial institutions have an opportunity to better educate their cardholders about the protective features of their cards.

Press Release, First Data Corp., First Data Survey Finds Consumers Want Variety of Electronic Payment Choices (June 30, 2005), <http://ir.firstdatacorp.com/news/releasedetail.cfm?ReleaseID=168965>. See also Mark Furletti, *Payment System Regulation and How It Causes Consumer Confusion* (Fed. Reserve Bank of Phila., Discussion Paper No. 04-05, 2004), available at

This lack of uniformity has been heightened by the growth of new payment mechanisms. Some of these mechanisms, operated by non-banks, piggyback off of existing payment mechanisms such as bank accounts and credit cards. The providers of these mechanisms add another payments layer to transactions. These new payment mechanisms or systems are referred to as payment “intermediaries.” Non-bank intermediaries serve as conduits to allow payments from one person or entity to another with the initial source of funds being paid into a new account maintained by the intermediary. The funds may be transferred into the new account through a choice of payment methods.

In recent years, there has been a lack of certainty among regulators and market participants as to when such intermediaries are regulated and under what type of regulation for different points of a consumer transaction. Since they offer payment choice, the funding stream for each transaction may determine what rules apply. This may not, however, be readily apparent to the consumer.

Furthermore, new variations on existing payment methods have caused payment methods to change midstream. Electronic check conversion, for example, can transform a paper check into an electronic funds transfer governed by the EFTA and Regulation E.¹⁰ Consumers may not be aware that payment methods can and may be transformed through use of an intermediary or through conversion of a payment instrument into a funds transfer.

The growth of prepaid cards and stored value is another significant factor which may have led to consumer confusion. As consumers use prepaid cards in a manner that replicates the use of a debit card, for example, at a point-of-sale (POS) terminal, they may expect that such card is treated

http://www.phil.frb.org/pcc/papers/2004/PaymentSystemRegulation_112004.pdf (summarizing remarks of Professor Mark E. Budnitz).

9. Mann, *supra* note 3, at 637–38. See generally Mark E. Budnitz, *Developments in Payment Systems Law*, 10 J. CONSUMER & COM. L. 2 (2006), available at <http://www.jtexconsumerlaw.com/V10N1/V10N1Developments.pdf>.

10. In 2005, the Federal Reserve Board proposed amendments to Regulation E to cover merchants with respect to electronic check transactions. Consumers must now receive notice if their checks will be processed electronically either at the point of sale or when they are remitting payments as part of a lockbox or accounts-receivable transaction. The impetus for such notice relates to consumer confusion. Today, when a consumer mails a check for payment to a credit card issuer, the transaction may be covered by three separate sets of rules. Consumer confusion may be further exacerbated because the consumer will not know at the time he mails the check which method of processing will be chosen by the credit card biller. See 12 C.F.R. § 205.3 (2007); see also Mark E. Budnitz, *Consumer Payment Products and Systems: The Need for Uniformity and the Risk of Political Defeat*, 24 ANN. REV. BANKING & FIN. L. 247, 255 (2005).

the same as a debit card. The term “prepaid” debit card is emblematic of this phenomenon.¹¹ In fact, however, most such cards, even when carrying large balances, are not regulated by the Federal Reserve.¹²

When consumers have competing methods from which to choose, does the lack of uniformity impact their choice of payment method? Is a lack of uniformity leading to less efficiency and predictability in the changing retail payments market? In the absence of regulation, will unregulated entities invest in appropriate error resolution mechanisms? Does consumer confusion lead to market failure with respect to efficient types of error resolution in retail payments schemes?

This article examines apparent sources of consumer confusion with respect to different retail payment methods and the consumer protections which may or may not flow from each method. The article examines how consumer confusion appears to be exacerbated or impacted because payment methods, which were previously distinct, are now routinely woven together, either through the emergence of new payment vehicles or through changes in electronic payment processing. This blending and convergence may cause consumers to have unclear expectations as to what rules govern their transactions at a given point in time.

As payment methods converge, the electronic funds transfer is becoming a central payment mechanism for the consumer (whether or not such a transfer is regulated under the Electronic Fund Transfer Act or Federal Reserve Regulation E). Given existing confusion and the related convergence, is it time to revisit the need for uniformity in consumer payment rules? This article examines one aspect of uniformity: error resolution.

Part I of this article examines the situations where consumer confusion may exist with respect to different payment methods, including an examination of the role of payment intermediaries, the growth of electronic check conversion, and the increasing consumer use of prepaid cards. Part II of

11. The U.S. Department of Justice defines stored-value cards as follows:

Open system cards operate on major credit card networks and can be used anywhere that the network brand is accepted, frequently including worldwide ATMs. These cards are similar in appearance to traditional debit cards and are embossed with the cardholder's name. Semi-open system cards generally have the same features and limitations as open system cards but cannot be used to access cash at ATMs.

NAT'L DRUG INTELLIGENCE CTR., U.S. DEP'T OF JUSTICE, PRODUCT NO. 2006-R0803-001, PREPAID STORED VALUE CARDS: A POTENTIAL ALTERNATIVE TO TRADITIONAL MONEY LAUNDERING METHODS 2 (2006), available at <http://www.usdoj.gov/ndic/pubs11/20777/20777p.pdf>.

12. Katy Jacob, Sabrina Su, Sherrie L.W. Rhine & Jennifer Tescher, Stored Value Cards: Challenges and Opportunities for Reaching Emerging Markets 21 (Oct. 1, 2005) (unpublished working paper prepared for the Federal Reserve Board 2005 Research Conference), available at http://www.newyorkfed.org/regional/svc_em.pdf.

this article asks whether uniform rules governing error resolution might be desirable given the confusion and incoherence which currently exists. This article suggests that there is a market failure when it comes to error resolution in payments.

The goal of such a change would be to provide greater certainty and predictability with respect to error resolution for a broader range of consumer payment vehicles. With certainty and predictability, consumers may be more confident in adopting newer payment methods, and will do so without confusion as to which rules may govern the various aspects of their transactions. As for loss allocation, a change in rules would allow payments providers to operate with clear and consistent rules for all types of transactions. It would also create incentives for financial institutions and payments processors to invest in technology to reduce and detect processing errors. Moreover, merchants and consumers alike would have the benefit of the same type of procedures for payment related errors—irrespective of which method a consumer chooses to use to transact.

Would it be desirable to have more uniform rules with respect to error resolution for a larger class of consumer payment mechanisms? Consumers may already be getting such benefits with respect to checks, because of electronic check conversion. As more payments converge and become funds transfers, is it time to unify error resolution mechanisms? The article makes a proposal: Regulation E-style error resolution should be made clearly applicable to payment intermediaries and possibly to other payment mechanisms, with a more limited application of the periodic statement requirement found in Regulation E.

This article argues that, at a minimum, it is time to extend Regulation E and the EFTA to clearly encompass payment intermediaries as a means of foreclosing existing ambiguities or gaps in regulatory coverage. It also explores the theoretical basis for uniform error resolution mechanisms, and contemplates the expansion of Regulation E to a larger class of stored-value and prepaid card products. The extension of Regulation E could either replicate the manner in which payroll cards were incorporated into the regulation or use a time period linked to the date of the transaction rather than a periodic statement. Rather than having to provide each customer with costly printed periodic statements, general purpose stored-value issuers or payment intermediaries could focus on providing transaction histories in electronic form or over the telephone. At the same time, a consumer could obtain a written transaction history solely upon request.

Finally, this article concludes that in the absence of federal regulation, the use of state licensing laws (such as money transmission laws) can be used to ensure that payment system providers that remain unregulated at the federal level or where regulation is not clear still provide consumers with adequate means of redress and error resolution. The ability of a state regulator to impose requirements as part of a safety and soundness regime, or as part of licensing requirements, may be a useful alternative as the Federal Reserve Board continues to examine the role of intermediaries and prepaid card issuers.

This article focuses on the procedural issues surrounding error resolution. It uses this as a means of exploring the desirability (or lack thereof) of uniformity in procedure. It does not delve into the issues of liability limitations or the ability of a consumer to use the payment system to challenge a merchant with respect to an underlying contract.¹³ Rather, this article focuses on error resolution and the processes by which a consumer has a right to have his account recredited and an investigation commenced with respect to processing errors which occur when he makes a payment using a mechanism such as a check, credit card, or debit card.

For the purposes of this article, the term “error resolution” has been borrowed from the Electronic Fund Transfer Act and Federal Reserve Regulation E to include, *inter alia*, the following types of errors:

- (i) An unauthorized electronic fund transfer [to the extent it needs to be reported as part of an error resolution process];
- (ii) An incorrect electronic fund transfer to or from the consumer’s account;
- (iii) The omission of an electronic fund transfer from a periodic statement;
- (iv) A computational or bookkeeping error made by the financial institution relating to an electronic fund transfer; [and]
- (v) The consumer’s receipt of an incorrect amount of money from an electronic terminal.¹⁴

13. This issue has been addressed in other articles. See, e.g., Clayton P. Gillette, *Rules, Standards, and Precautions in Payment Systems*, 82 VA. L. REV. 181 (1996) (evaluating the differing liability regimes for credit cards and checks with respect to unauthorized use); Mann, *supra* note 3 (evaluating the credit/debit distinction with respect to differing liability rules for credit and debit cards).

14. 12 C.F.R. § 205.11(a)(1) (2007). Under Truth in Lending (Regulation Z), 12 C.F.R. § 226.13(a), the definition of a billing error is as follows:

- (1) A reflection on or with a periodic statement of an extension of credit that is not made to the consumer or to a person who has actual, implied, or apparent authority to use the consumer’s credit card or open-end credit plan.
- (2) A reflection on or with a periodic statement of an extension of credit that is not identified in accordance with the requirements of §§ 226.7(b) and 226.8.

I. THREE SCENARIOS THAT MAY CAUSE CONFUSION WITH RESPECT TO ERROR RESOLUTION IN CONSUMER PAYMENTS

What is the current status of error resolution with respect to emerging electronic payment methods? There are at least three types of emerging payment methods where the status of error resolution is unclear or where payments may be unregulated with respect to consumer error resolution. The legal framework for consumer error resolution has not been updated sufficiently to clearly encompass new types of transactions.

Part I of this article discusses how various error resolution rules apply to new electronic payment methods and highlights the ambiguities or gaps in the current regulations.

Some of the events that have given rise to potential consumer confusion include (i) the emergence of payment intermediaries that facilitate payments using multiple methods, (ii) the growing use of electronic check conversion, which transforms a negotiable instrument into an electronic funds transfer, and (iii) the emergence of prepaid cards as an important payment substitute that has the characteristics of an electronic funds transfer but is typically not treated as one for regulatory purposes.

A. Scenario One: Payment Intermediaries

1. P2P Payments

Person-to-Person or Peer-to-Peer (P2P) payments providers are those who allow their customers to open accounts and to move money between those accounts. PayPal is a large and successful example of a P2P payment provider.¹⁵ P2P payments providers have also been referred to as Internet funds transfer providers. Such services allow consumers to move money

(3) A reflection on or with a periodic statement of an extension of credit for property or services not accepted by the consumer or the consumer's designee, or not delivered to the consumer or the consumer's designee as agreed.

(4) A reflection on a periodic statement of the creditor's failure to credit properly a payment or other credit issued to the consumer's account.

(5) A reflection on a periodic statement of a computational or similar error of an accounting nature that is made by the creditor.

(6) A reflection on a periodic statement of an extension of credit for which the consumer requests additional clarification, including documentary evidence.

(7) The creditor's failure to mail or deliver a periodic statement to the consumer's last known address if that address was received by the creditor, in writing, at least 20 days before the end of the billing cycle for which the statement was required.

15. Carl Kaminski, Note, *Online Peer-to-Peer Payments: PayPal Primes the Pump, Will Banks Follow?*, 7 N. C. BANKING INST. 375, 376-78 (2003).

over the Internet or through another device, such as a PDA or a cell phone, to another consumer or merchant. P2P payments providers, such as PayPal, allow consumers to open online accounts with a provider directly. These are referred to as “accounts” but are not individual depository accounts which are held by banks.¹⁶

*a. Funding a P2P Account*¹⁷

There are multiple ways in which a person who wishes to use a P2P payments service can “prefund” a P2P account. First, a customer could fund an account using an ACH bank transfer. Second, a customer could fund his account using a credit card or a debit card. A third choice would be funding the account using prepayment, such as by sending in a check or money order.¹⁸

*b. Transferring Funds/Making Payment*¹⁹

When a user (for example, an auction buyer) wishes to send money to another person (for example, an online auction seller) in the P2P environment, a user may have several choices. Funds may be sent from a user’s account with the P2P provider. For example, a PayPal customer can send funds that are parked in his PayPal account to another PayPal account holder.²⁰ Alternatively, the same user could request that payment be made directly from his bank account. The P2P intermediary would facilitate the transfer, assuming the user had given the intermediary authority or information to debit his bank account. A user could alternatively charge his credit card directly or provide a debit card number in order to make payment. In each case, an intermediary is the entity that facilitates the transaction.

What happens if there is an error in the payment made, such as a duplicate payment or a payment in an incorrect amount? The answer to this question should mirror the type of payment mechanism used to either fund a P2P account or to make payments on behalf of a P2P customer.

16. See PAYPAL, USER AGREEMENT § 5.1 (2008), <http://www.paypal.com/cgi-bin/webscr?cmd=xpt/UserAgreement/ua/USUA-outside> (stating that PayPal accounts may be eligible for pass-through FDIC deposit insurance).

17. For prior descriptions of funding of P2P accounts, see Anita Ramasastry, *Nonbank Issuers of Electronic Money: Prudential Regulation in Comparative Perspective*, in 4 CURRENT DEVELOPMENTS IN MONETARY AND FINANCIAL LAW 664–67, 670–71 (2005), and Ronald J. Mann, *Regulating Internet Payment Intermediaries*, 82 TEX. L. REV. 681, 683–86 (2004).

18. See PAYPAL, *supra* note 16, § 3.2–3.3.

19. Ramasastry, *supra* note 17, at 670–71; Mann, *supra* note 17, at 684–86.

20. PAYPAL, *supra* note 16, § 3.

If an account is funded with a credit card, the protections of the Truth in Lending Act (TILA) and Regulation Z should apply. By contrast, if an account is funded by bank transfer, this would trigger the EFTA and Regulation E.²¹ If a consumer prefunded a P2P account by check, Articles 3 and 4 of the U.C.C. would apply to the transaction.

What about erroneous payments made via a P2P intermediary? First, one might state that if the payment were made with a credit card, TILA and Regulation Z should apply. This would be important to the extent that a user has a dispute with a merchant to whom he had sent funds. For example, a consumer that received defective goods from a PayPal seller, and who made payment using a credit card, might expect that she could use the chargeback provisions under Regulation Z in the event that there was a problem with the contract, or use the “billing error” provisions of Regulation Z if the goods were not delivered at all. At least one credit card issuer, however, previously asserted that it was making a payment of funds rather than facilitating an underlying transaction—akin to a cash advance. Under that scenario, Regulation Z’s chargeback provisions would not apply.²² For consumers, the choice of funding method would lead to different consumer protections—even though the intermediary (PayPal) would be the same in each case.²³

As an alternative, a PayPal buyer might make payment directly from his PayPal account (user account) or via a bank transfer. In the case of a bank transfer, Regulation E would apply. But what about situations where a consumer uses her P2P account to make payment to someone? In those situations, the applicable rules were initially not apparent to regulators and

21. Mann, *supra* note 3, at 634, 649. Ronald Mann comments:

[I]f the buyer has the good luck (or foresight) to fund the purchase directly from a credit card, the transaction is governed by the TILA/Z regime. Thus, among other things, the purchaser should have the right to withhold payment if the seller in fact never supplies the goods. The statute grants a broad right to the cardholder to withhold payment based on “all claims (other than tort claims) and defenses arising out of any transaction in which the credit card is used as a method of payment.” Thus, if the transaction through PayPal is viewed as a single unified transaction in which the auction purchaser uses PayPal and the credit card to buy something from an auction seller, the TILA/Z regime protects the purchaser.

Mann, *supra* note 17, at 696 (quoting 15 U.S.C. § 1666i (2000)).

22. As Mann notes:

The statute could be read more narrowly. American Express, for example, apparently has argued that the transaction is one in which PayPal is the seller and that PayPal has satisfied its obligation by sending money to the seller. On that understanding, American Express (or any other card issuer with the boldness to raise the argument) would have no obligation to respect the defense under 15 U.S.C. § 1666[i]. Even American Express, however, receded from that position after it was challenged recently by the New York Attorney General.

Id. at 696 n.87.

23. *Id.* at 695–96.

consumers. Some commentators noted that it was unclear what law would apply to a funds transfer made directly from a P2P user's account to another user's account.²⁴ In other words, would such a transfer from a non-bank account constitute a "funds transfer" under Regulation E? Ronald Mann has pointed out that such a transfer is covered by Regulation E and that a PayPal account would qualify as an account under Regulation E. While Mann is correct, this point was not initially clear to consumers and other stakeholders.²⁵

Recent litigation against PayPal further highlights the uncertainty that arose with respect to the role of P2P providers in the payments chain. In 2002, PayPal was the subject of multiple class action lawsuits, which focused on the company's obligations pursuant to the EFTA. The lawsuits were consolidated into one lawsuit in the United States District Court for the Northern District of California, San Jose Division.²⁶

The consolidated lawsuit alleged that PayPal had violated the EFTA by failing (i) to provide its customers with information about its dispute resolution procedures, and (ii) to follow certain procedures when handling complaints of unauthorized or erroneous funds transfers. For example, the lawsuit alleged that PayPal did not provide account statements in the man-

24. Jeffrey P. Taft, *Internet-Based Payment Systems: An Overview of the Regulatory and Compliance Issues*, 56 CONSUMER FIN. L. Q. REP. 42, 44 (2002).

25. Mann, *supra* note 17, at 695–96.

26. Settlement Agreement at 1–2, *In re PayPal Litigation*, No. CV-02-01227-JF/PVT (N.D. Cal. June 11, 2004). According to a settlement document that seems to have been sent to potential class members:

In early 2002, Plaintiffs Roberta Toher and Jeffrey Resnick filed separate lawsuits against PayPal, Inc. These two cases were later consolidated into one lawsuit in the United States District Court for the Northern District of California, San Jose Division, entitled *In re PayPal Litigation*, Case No. CV 02 01227-JF (PVT). The lawsuit alleges that PayPal violated the federal Electronic Fund Transfer Act . . . including provisions requiring PayPal to supply customers with information about dispute resolution procedures and to follow certain procedures when investigating complaints of unauthorized or incorrect electronic fund transfers. For example, the lawsuit claims that PayPal did not provide account statements in the manner required by the EFTA. The lawsuit further alleges that PayPal has placed inappropriate restrictions or other limits on customers' accounts and engaged in other improper practices. Based on these practices, the lawsuit asserts claims under California state law for conversion; money had and received, negligence, and violations of consumer protection statutes.

PayPal does not believe that it did anything wrong. In fact, PayPal disputes that the EFTA, originally passed in 1978, applies to its business. PayPal denies any and all liability for the claims alleged in the lawsuit. The Court did not decide in favor of the Plaintiffs or PayPal. Instead, beginning in the fall of 2003, the parties began a series of settlement negotiation sessions mediated by United States Magistrate Judge Edward Infante. Eventually, in November 2003, both sides agreed to a settlement in principle. By settling their claims, both parties avoided the uncertainty and cost of a trial. The settlement provides money and other benefits to the Class. On June 11, 2004, the parties entered into a formal, written Settlement Agreement

Truth or Fiction, Email About a PayPal Class Action Settlement, <http://www.truthorfiction.com/rumors/p/paypalsettle.htm> (last visited Mar. 30, 2008).

ner prescribed by the EFTA.²⁷ The lawsuit further alleged that PayPal had incorrectly removed funds from consumer accounts and made erroneous charges to those accounts as well.²⁸

During the fall of 2003, the parties began a series of settlement negotiation sessions mediated by the court.²⁹ On June 11, 2004, the parties entered into a formal settlement agreement.³⁰ The settlement requires that PayPal consent to the entry of a court-ordered injunction that mandates various changes to its business practices. At the time of settlement, PayPal stated that it had already implemented these changes. The injunction included PayPal's agreement to comply with certain notice and error resolution procedures of the EFTA, and to follow certain procedures for limiting accounts and responding to and returning funds to customers whose accounts had been restricted.³¹ When PayPal settled, it did not admit it was subject to the EFTA. Instead, the company established a settlement fund to provide compensation to consumers who had previously sought remedies under the EFTA.³²

More recently, during the fall of 2006, twenty-eight states' attorneys general reached a settlement with PayPal that also related to consumer confusion as to applicable rights and governing consumer protection rules for PayPal transactions. The settlement document states that "[t]he parties agree that different terms of the consumer protection programs, their relationship to credit card and chargeback rights, and the pre-existing differences between the EFTA and FCBA [the Fair Credit Billing Act] may have caused some confusion among Users making Payments."³³

As part of the settlement, PayPal has agreed to "summarize on the funding source information Webpage the different statutory rights and remedies available for Payments under the EFTA and FCBA to Users for the different types of funding sources that may be used to fund Payments."³⁴ The settlement notes that "PayPal will also provide . . . a Clear and Conspicuous statement which advises that the User should, prior to

27. [Proposed] Second Amended Class Action Complaint at 6–7, *In re PayPal Litigation*, No. CV-02-1227 JF EAI (N.D. Cal. Nov. 24, 2003).

28. *Id.* at 5, 8–11.

29. Settlement Agreement, *supra* note 26, at 2–3.

30. *Id.* at 1.

31. *Id.* at 3.

32. *Id.* at 8.

33. Assurance of Voluntary Compliance or Discontinuance ¶ 4, *In re PayPal, Inc.*, available at [http://myfloridalegal.com/webfiles.nsf/WF/MRAY-6U3L4N/\\$file/PayPal_AVC.pdf](http://myfloridalegal.com/webfiles.nsf/WF/MRAY-6U3L4N/$file/PayPal_AVC.pdf) (Office of the Attorney General of Florida's website).

34. *Id.* ¶ 12f(ii).

committing to the addition of a bank account, review and understand the rights and remedies available for different Payment sources under the EFTA and FCBA.”³⁵

The settlement also notes that unless PayPal is operating as a credit card issuer, it will not advertise “that its Payments services give consumers the rights and privileges expected of a credit card transaction.”³⁶ Rather, PayPal may state that Users who fund payments using a credit card will be eligible for the same protections from their card issuer as if the user’s credit card had been given directly to the merchant. PayPal also agreed to the following:

Paypal will not in its User Agreement or seller and buyer protection programs use branding, descriptions or representations (including but not limited to use of the terms “electronic funds transfer,” “error resolution,” “unauthorized transaction,” “billing error,” and “chargeback”) in a way that is likely to cause confusion by leading Users to believe that by using the PayPal programs they are exercising rights pursuant to state or federally mandated consumer protection laws or rules that do not apply to such programs.³⁷

One would assume that, for transfers that are made from a customer’s bank account as payment, this would constitute a funds transfer under the EFTA and Regulation E. But even with such transfers, as Mann notes, it is unclear to what extent a transfer initiated by an interloper who gained access a consumer’s P2P account and authorized a transaction would be treated as unauthorized under Regulation E (assuming that a customer had given his access code to the P2P intermediary). In this instance, the transfer, if erroneous (because unauthorized), might not qualify for error resolution.³⁸

35. *Id.* ¶ 12f(iv).

36. *Id.* ¶ 12h(i).

37. *Id.* ¶ 12h(iii).

38. Mann, *supra* note 17, at 697. As Mann states:

The only ambiguity applies if the interloper uses the information to withdraw funds from the consumer’s deposit account. In that event—because of an odd glitch in the regulation—it seems that neither the P2P provider nor the bank is obligated to return the funds to the consumer’s deposit account. The bank apparently is not obligated because it is entitled to treat the transaction as authorized. A transaction is authorized under the EFTA if it is executed by a party (the P2P provider in this case) to whom the consumer has given the relevant access information. Because that fact makes the transaction “authorized” with respect to the account from which funds were drawn, it appears that the rules related to “unauthorized” transactions impose no obligation on the P2P provider for the loss. The most likely source of recovery for the consumer would be an action against the P2P provider’s depository institution (the entity that originated the ACH transfer) for a breach of the applicable National Automated Clearing House Association (NACHA) warranties. Because of the limited litigation to date in that area, it is difficult to assess the likelihood of prevailing in such an action.

Id. at 696 (citations omitted).

This suggests that there are aspects of PayPal's payment mechanisms that do not clearly qualify for traditional regulatory coverage, even when PayPal has chosen to offer the same rights to its users. This may include situations where a consumer has used a credit card to make a payment but PayPal is the merchant of record rather than a seller. In such instances, Regulation Z chargeback rights may not exist between the User as a buyer and the seller who ultimately receives payment from PayPal. In other instances, a funds transfer may not qualify as an electronic funds transfer subject to Regulation E. PayPal does provide for error resolution procedures in its user agreement that comply with Regulation E procedures.³⁹

2. Electronic Bill Presentment and Payment

The second type of emerging payments method that has caused some regulatory uncertainty is Electronic Bill Presentment and Payment (EBPP). An EBPP service pays bills directly from a customer's bank account or by charging a consumer's credit card. Such services may be offered in differ-

39. PAYPAL, *supra* note 16, at ¶ 12.2–12.3, 12.5. The User Agreement reads:

Notifying PayPal of Errors and/or Unauthorized Transactions. To notify us if you believe there has been or will be an error or unauthorized transaction on your Account, [contact us by telephone, by using this online report form, or in writing]. If you initially provide information to us via the telephone, we may require that you send your complaint or question in writing within 10 Business Days after the phone contact. Please complete the affidavit form and submit it online or mail it to PayPal

Review of Reports of Errors and/or Unauthorized Transactions. We will advise you of the results of our investigation within 10 Business Days after we receive your notice (or 20 Business Days for transactions done at a point of sale terminal or outside the United States). If we have made an error, we will correct it promptly. If we need more time, however, we may take up to 45 Days to investigate your complaint or question (and 90 Days for transactions made at a point of sale terminal or outside the United States). If we decide that we need more time, we will provisionally re-credit your Account for the amount you think is in error within 10 Business Days after we receive your notice; so that you will have use of the money during the time it takes us to complete our investigation. If you initially provided information to us via the telephone and we do not receive your complaint or question in writing within 10 Business Days after your oral notice, we are not required to provisionally re-credit your Account.

. . . .

Errors. If we discover a processing error, we will rectify the error. If the error resulted in your receiving less money than you were entitled to, PayPal will credit your Account for the difference. If the error results in you receiving more money than you were entitled to, PayPal may debit the extra funds from your PayPal Account. If the error resulted in our not completing a transaction on time or in the correct amount, we will be liable for your losses or damages directly and proximately caused by this failure, unless:

- a. through no fault of ours, you did not have enough available funds to complete the transaction,
- b. our system was not working properly and you knew about the breakdown when you started the transaction, or
- c. circumstances beyond our control (such as fire or flood or loss of Internet connection) prevented the transaction, despite our reasonable precautions.

ent formats.⁴⁰ One such format is a situation where a “biller” (e.g., a merchant or a public utility) offers consumers the opportunity to visit a biller-operated website, and to authorize payment via credit card, debit card, or ACH transfer (debit or credit).⁴¹ With respect to “biller” web sites, errors may arise if a biller accesses a consumer’s account and pays another customer’s bill or pays itself for a bill that the consumer did not authorize.⁴² A second type of bill payment service is offered by financial institutions. A consumer can direct his or her bank, for example, to pay bills on a one-time or a recurring basis using ACH transactions.⁴³

The third type of EBPP service is offered by non-bank entities, sometimes referred to as lockbox providers.⁴⁴ Companies such as CheckFree allow consumers to register to pay bills from multiple companies through one portal. With such a service, a consumer logs onto CheckFree’s website and accesses her CheckFree account to view bills, which have been presented by multiple billers.⁴⁵ A consumer can direct CheckFree to make payments to different billers on her behalf. CheckFree will then initiate a funds transfer out of a consumer’s bank account in order to pay the biller. Alternatively, a consumer may choose to pay a bill with his or her credit card. The EBPP transactions that occur are typically covered by Regulation E.⁴⁶

With a non-bank EBPP provider, there may be errors that arise which are not covered by Regulation E. Consumers may pay erroneous or fabri-

40. Ann H. Spiotto, *Electronic Bill Payment and Presentment: A Primer 1* (Fed. Reserve Bank of Chi., Emerging Payments Occasional Paper Series, Paper No. EPS-2001-5, 2001), available at <http://www.chicagofed.org/publications/publicpolicystudies/emergingpayments/pdf/eps-2001-4.pdf>; see also NAT’L ELECTRONIC COMMERCE COORDINATING COUNCIL, ELECTRONIC PAYMENTS PRIMER 15–18 (2002), available at http://www.ec3.org/Downloads/2002/epayments_primer.pdf (describing various forms of ACH electronic checks).

41. NAT’L ELECTRONIC COMMERCE COORDINATING COUNCIL, *supra* note 40, at 18; see also Stuart Weiner & Terri Bradford, *Is Electronic Bill Presentment and Payment Poised for Growth?*, AT YOUR SERVICE (Fed. Reserve Bank of Kan. City, Kan City, Mo.), Summer 2002, at 2, available at <http://www.kansascityfed.org/PUBLICAT/PSR/Newsletters/EBPP.pdf>.

42. As Mann indicates:

[T]he consumer cannot claim that the transactions are “unauthorized” for purposes of the EFTA/E regime. For similar reasons, the consumer cannot claim that they amount to an “error.” The statutory definition of “error,” albeit vague, is directed to errors by the bank, not errors by a third party to whom the consumer has granted access.

Mann, *supra* note 17, at 698.

43. Spiotto, *supra* note 40, at 2; see also Weiner & Bradford, *supra* note 41, at 2.

44. Weiner & Bradford, *supra* note 41, at 2–3.

45. CheckFree, Frequently Asked Questions, https://mycheckfree.com/br/wps?rq=login&slpg=Y&file=authentication/login_baseline_faq&esc=93096239&sp=10001 (last visited Mar. 14, 2008).

46. The Official Federal Reserve Staff Commentary to Regulation E has been amended to state that the definition of funds transfer covers bill payment services. Electronic Fund Transfers, 66 Fed. Reg. 15,187, 15,190 (Mar. 16, 2001).

cated bills.⁴⁷ A consumer may pay a bill that is either created by a third party interloper or that is erroneously posted to his account. In either scenario, the consumer still “authorizes” the payment transfer, having been duped by the interloper or unaware that he received a bill in error. In these circumstances the transaction may neither be unauthorized nor qualify as an error.

In addition, there are situations when an EBPP provider makes a payment on behalf of a consumer to a merchant, but does so by generating a check image (a remotely created check) or by debiting a consumer’s account (which would be a funds transfer) and then paying the merchant with a traditional paper check. In this case, the payment of the merchant by check would likely qualify as a funds transfer if the original payment request were made by computer, unless a customer’s financial institution notified the customer that payments to a specific payee or payees would be made only by check.⁴⁸

While this may not be common, a company such as CheckFree reserves the right to make a payment by this method. A consumer may be expecting that his payment will be made with a funds transfer, when in fact the payment was converted at the discretion of an EBPP provider. Perhaps a particular merchant cannot receive an ACH payment or, for another reason, a check must be sent in lieu of a transfer. If a consumer is provided with notice of this practice, the transaction will fall outside of Regulation E and perhaps back into ordinary contract.

CheckFree is one of the largest non-bank EBPP providers. As part of its user terms and conditions, it provides a ninety day window in which a consumer must report an error to his or her bank account. The terms state: “If you think your financial institution statement is incorrect or you need more information about a Service transaction listed on the statement, we must hear from you no later than ninety (90) days after the FIRST statement was sent to you on which the problem or error appears.” The error

47. For a lengthier discussion of these types of errors, see Mann, *supra* note 17, at 699.

48. As at least one commentator has noted, “Presumably since computer initiated payments are covered by the regulation, such payments (even if made by paper instrument) are protected by the error resolution requirements of Section 205.11.” Spiotto, *supra* note 40, at 16 n.49; *see also* Electronic Fund Transfers, 66 Fed. Reg. 15,187, 15,193 (Mar. 16, 2001) (stating that section 205.3(b) covers a “payment made by a bill payer under a bill-payment service available to a consumer via computer or other electronic means, unless the terms of the bill-payment service explicitly state that all payments, or all payments to a particular payee or payees, will be solely by check, draft, or similar paper instrument drawn on the consumer’s account, and the payee or payees that will be paid in this manner are identified to the consumer”).

resolution procedure itself mirrors Regulation E.⁴⁹ Of course, a customer should typically contact his or her bank or financial institution to pursue a Regulation E error.

B. Scenario Two: Electronic Check Conversion and Substitute Checks

If a consumer pays a bill with a paper check, that check may eventually be processed in one of three ways. The original processing and collection of a check is governed by the Uniform Commercial Code. If the check is converted by a merchant, however, it may be converted into an electronic funds transfer subject to Regulation E. Finally, if a check is processed through electronic image exchange, a consumer will not receive his original check back but rather a “substitute check.”⁵⁰

Electronic check conversion relates to checks being converted by payees and turned into electronic funds/ACH transactions. Until recently, it was unclear whether such transactions were governed by Articles 3 and 4 of the U.C.C. or by Regulation E.⁵¹ One relevant type of conversion involves conversion at the point of sale or purchase. With a point-of-purchase (POP) entry, a merchant takes a consumer’s check, marks it “void,” and hands it back to the consumer. At that point, the check is processed as an

49. In the event of an error or if the customer has a question, CheckFree requires the following: You must:

1. Tell us your name and Service account number;
2. Describe the error or the transaction in question, and explain as clearly as possible why you believe it is an error or why you need more information; and,
3. Tell us the dollar amount of the suspected error.

If you tell us verbally, we may require that you send your complaint in writing within ten (10) Business Days after your verbal notification. We will tell you the results of our investigation within ten (10) Business Days after we hear from you, and will correct any error promptly. However, if we require more time to confirm the nature of your complaint or question, we reserve the right to take up to forty-five (45) days to complete our investigation. If we decide to do this, we will provisionally credit your Payment Account within ten (10) Business Days for the amount you think is in error. If we ask you to submit your complaint or question in writing and we do not receive it within ten (10) Business Days, we may not provisionally credit your Payment Account. If it is determined there was no error we will mail you a written explanation within three (3) Business Days after completion of our investigation. You may ask for copies of documents used in our investigation. The Service may revoke any provisional credit provided to you if we find an error did not occur.

CheckFree, Terms and Conditions, <https://mycheckfree.com/br/wps?rq=vte&esc=93096239&sp=WEBBL> (last visited Mar. 31, 2008).

50. For an interesting description, see *Implementation of the Check Clearing for the 21st Century Act: Hearing Before the Subcomm. on Fin. Inst. and Consumer Credit of the H. Comm. on Fin. Serv.*, 109th Cong. 56–57 (2005) [hereinafter *Hearing*] (prepared statement of Mark Budnitz, Professor of Law, Georgia State University College of Law).

51. For a useful example of consumer education that builds on this see Fed. Reserve Bd., *When is Your Check Not a Check: Electronic Check Conversion*, www.federalreserve.gov/pubs/checkconv/checkconv.pdf (last visited Mar. 31, 2008).

ACH electronic transfer, which moves funds out of the consumer's bank account.⁵²

A second situation involves checks mailed to billers, often credit card companies. The biller receives the check which has been sent to a "lock-box" where the check is scanned and retained. The check is not sent on for collection, however. The check payment is converted to an ACH transfer.⁵³ NACHA refers to this as an Account Receivable Conversion (ARC) entry. In both of these situations, a consumer thinks he or she is sending in a check for payment and is instead submitting to an ACH funds transfer.

The Federal Reserve Board has made it clear that Regulation E applies to electronic check conversion transactions.⁵⁴ Before this clarification, it was unclear to what extent Regulation E applied and what obligations, if any, merchants had to obtain authorization from consumers before converting their checks into funds transfers. The Regulation E amendments also made it clear that merchants were covered by Regulation E for the limited purpose of having to give consumers notice of when their check was being converted.⁵⁵

While most electronic check conversions are covered by Regulation E, not all are. This leads to a divergence in treatment for payments that may

52. For a useful description, see Stephanie Heller, *An Endangered Species: The Increasing Irrelevance of Article 4 of the UCC in an Electronics-Based Payment System*, 40 LOY. L.A. L. REV. 513, 516-20 (2006). This type of transaction is referred to as a point-of-purchase (POP) ACH entry. *Id.* at 517-18.

53. *Id.* at 519 (discussing an ARC).

54. Electronic Funds Transfers, 71 Fed. Reg. 1638, 1659 (Jan. 10, 2006) (codified at 12 C.F.R. § 205.3(b)(2)(i)). As Heller notes, similar guidance was previously provided in the official commentary to Regulation E. Heller, *supra* note 52, at 523 & n.50; *see also* Electronic Fund Transfers, 66 Fed. Reg. 15,187, 15,187-89 (Mar. 16, 2001) ("Under the final rule, where a consumer authorizes a one-time EFT from the consumer's account using information from a check to initiate the transfer, the transaction is covered by Regulation E. Application of the rule is consistent and the result is that whether the check is blank, partially completed, or fully completed and signed; after the check is presented at POS or mailed to a merchant or lockbox and later converted to an EFT; or whether the check is retained by the consumer, the merchant, or the merchant's financial institution. . . . The final rule provides that where a consumer authorizes the use of a check for initiating an EFT, the transaction is not deemed to be originated by check. The transaction is covered by Regulation E. . . . In the context of check conversion, authorization takes place if the consumer engages in the transaction after receiving notice that the transaction will be treated as an EFT.").

55. As the Federal Reserve Board indicated:

Among other things, the final rule announced today provides that merchants and other payees that convert payments by check into electronic fund transfers must provide a notice to consumers to obtain consumer authorization for the electronic fund transfer. Merchants and other payees must also notify consumers that if a check is converted, funds may be debited from consumers' accounts as soon as the same day that payment is received, and the check will not be returned by their financial institution.

Press Release, Federal Reserve Board (Dec. 30, 2005), available at <http://www.federalreserve.gov/BoardDocs/press/bcreg/2005/20051230/default.htm>.

be processed in the same manner, and may also lead to consumer confusion as to what will happen to the instrument. For example, not all checks are eligible for conversion under the NACHA rule.⁵⁶ Moreover, when a merchant or payee initiates an electronic funds transfer in error, the transaction is not covered by Regulation E. For example, when a payee mistakenly initiates an electronic check transaction, such as when a payee attempts to convert a money order, such transactions are not subject to the EFTA even if initiated as an electronic check transaction.⁵⁷ Thus, a consumer might produce a negotiable instrument at the point of sale, see it converted, and believe that it is now being treated as an electronic funds transfer or ACH transaction. In fact, the transaction will still be governed by the Uniform Commercial Code.⁵⁸

If a check is treated as a check rather than as an ACH transaction, the legal consequences to the consumer are significant. Article 4 of the U.C.C. provides very different rights to a consumer than does Regulation E, including differences in the timeframe in which a payor must notify his bank about an unauthorized payment and differences in error resolution timeframes. Also, under Article 4, a consumer has no right of provisional recredit under U.C.C. section 4-406 as compared with Regulation E.⁵⁹

Electronic check conversion is one example of payment convergence. Merchants and billers can quickly convert a check governed by one set of rules into an electronic funds transfer, which is governed by a different regime. When a consumer pays by check, there is no certainty as to what the outcome will be in terms of rules and protections.

In the end, there is still uncertainty as to which method might be used when a consumer initiates a transaction by a check. And the method that is chosen by the merchant or the financial institution will drive a consumer's remedy. In theory, consumers should receive notice when a conversion of their check occurs, but this notice may not be effective or highly visible.⁶⁰

56. Heller, *supra* note 52, at 523 & n.53 (explaining that under the NACHA operating rules checks must conform to certain requirements, e.g., checks must be for amounts less than \$25,000).

57. Electronic Funds Transfers, 71 Fed. Reg. 1638, 1645 (Jan. 10, 2006) (discussing the issue of transactions initiated by mistake).

58. Heller, *supra* note 52, at 524 (“[I]f an item that was ineligible for conversion is nevertheless converted or where a court (or jury) determines that authorization to convert a check to an ACH debit entry was never obtained, a significant exception to this rule may result. In such instances, Article 4 may well apply, at least with respect to the rights of the drawer, despite the fact that the check was ‘collected’ through the ACH network.”).

59. *See also id.* at 524 n.57.

60. *Hearing, supra* note 50, at 57 (“If a business wants the option of processing a check under the ARC rules, Reg. E . . . requires the businesses to notify consumers that their checks may be processed electronically. Two of my credit card companies provide that notice. One has it buried in a very long dense paragraph that addresses many topics having nothing to do with ARC. The other company has the

Moreover, while Regulation E does provide consumers with better remedies, a consumer may prefer to have a paper check processed because of the longer time it takes for check collection.

Are consumers aware of check conversion and whether it will change their substantive legal rights? Check conversion, of course, accelerates the clearing process for a consumer's payment, and thus reduces the float because the consumer's account will be debited the same day or the next day. According to a recent study by the Federal Reserve of Boston, few respondents in a study (who were Federal Reserve employees) who were presented with the option of check conversion would alter their payment behavior. Only 10% stated they would alter their behavior for Lock-box/ARC conversion and 27% for POS conversion. Both percentages were lower than the 31% of respondents who were asked about changing their payment behavior if they were to lose their float.⁶¹ Therefore "either the respondents were unaware that check conversion reduces float or other factors restrained their actions (or both)."⁶²

The Boston Federal Reserve also asked about whether a consumer's knowledge of ARC procedures might change consumer behavior. As of June 2004, under NACHA rules, "companies were 'strongly encouraged' to notify U.S. consumers of their right to 'opt out' of conversions of checks to ARC and to provide information on how to do so."⁶³ Therefore, the Boston Fed asked consumers about whether they would exercise this right "under the circumstances." Approximately half said they would not opt out, 38% were uncertain (which may mean they did not understand) and 13% said they would opt out. The most common reasons respondents gave for opting out of ARC were "check return, float benefits, and concerns about errors."⁶⁴ As the Boston Fed pointed out, however, opting out is an active and time-consuming process requiring notice to the originator of the ARC. Some respondents that did change their payment method substituted debit for check conversion and online bill payment for check with ARC.⁶⁵

notice in the portion of the statement that I return when I pay the bill. Consequently, I have no record of that notice to refer to once I mail the payment.").

61. Marques Benton, Krista Blair, Marianne Crowe & Scott Schuh, *The Boston Fed Study of Consumer Behavior and Payment Choice: A Survey of Federal Reserve System Employees* 45 (Fed. Reserve Bank of Boston Public Policy Discussion Papers, No. 07-1, 2007), available at <http://www.bos.frb.org/economic/ppdp/index.htm>.

62. *Id.*

63. *Id.* at 46.

64. *Id.*

65. *Id.* at 47.

In addition to electronic check conversion, Congress recently enacted the Check Clearing for the 21st Century Act (“Check 21”), which became effective in October 2004. Mark Budnitz has noted that check substitution under Check 21 further muddies the waters with respect to check conversion.⁶⁶ Check 21 makes it easier for banks to electronically transfer check images instead of physically transferring paper checks by permitting banks to replace original checks with “substitute checks.”⁶⁷ Substitute checks are special paper copies of the front and back of the original check. They can be processed as if they were original checks. The front of a substitute check should state: “This is a legal copy of your check. You can use it the same way you would use the original check.”⁶⁸ A consumer can use a substitute check as proof of payment, just as he would use an original check.

If a consumer receives a substitute check rather than his original check (or other type of copy) and there is a problem or error with the check that causes a consumer to lose money, Check 21 provides a special procedure that permits a consumer to seek a refund (called an “expedited recredit”). This special procedure applies to substitute checks only.

Regulation E provides for a sixty-day window within which a consumer must report an error; Check 21 provides for a forty-day window if a substitute check is provided to the consumer and the consumer wants a recredit. The U.C.C. does not have any specific duties to investigate or credit within its provisions. Of course, a consumer could sue to compel a bank to investigate, and this might be considered a breach of the bank’s duty of care or an act in bad faith. If a consumer receives his original paper check, the deadline for reporting an error will be specified in the account agreement and can be as short as two weeks.⁶⁹ As Budnitz notes, “the Electronic Funds Transfers Act and Check 21 provide consumers with a reasonable non-litigation remedy.”⁷⁰ The U.C.C, however, does not.

C. Scenario Three: Stored-Value and Prepaid Cards

A third category of emerging payments that poses regulatory uncertainty is stored-value and prepaid cards or accounts.

66. Budnitz, *supra* note 10, at 254–55; *see also* Hearing, *supra* note 50, at 56.

67. BD. OF GOVERNORS OF THE FED. RESERVE SYS., REPORT TO THE CONGRESS ON THE CHECK CLEARING FOR THE 21ST CENTURY ACT OF 2003, at 6 (2007).

68. Fed. Reserve Bd., Consumer Guide to Check 21 and Substitute Checks, http://www.federalreserve.gov/pubs/check21/consumer_guide.pdf (last visited Mar. 31, 2008).

69. Hearing, *supra* note 50, at 56.

70. *Id.*

In 1996, the Federal Reserve Board noted that if stored-value cards were not covered by Regulation E “consumers might regard off-line accountable stored-value products as comparable to debit or credit cards, and thus might expect similar rights and remedies to apply.”⁷¹ This may relate to the fact that consumers have expectations that are developed as a result of their long term usage of credit cards and debit cards. To the extent that stored-value cards replicate other payment methods (e.g., in the use of a plastic card or a POS device), consumers may believe that certain protections accompany their use of a prepaid card.⁷²

During the 1990s, stored-value products were an innovation in payment systems technology. Today, stored-value products are often referred to as “prepaid” cards, referring to the fact that consumers pay value up front to purchase a card. The card is often used to pay for goods or services from a merchant or a host of merchants. The terms “stored value” and “prepaid,” while often used interchangeably, can also be used to signify different concepts. The term “stored value” is often associated with products for which prefunded value is recorded onto a payment instrument. The term “prepaid” is associated with products for which prefunded value is recorded on a remote database, which must be accessed for payment authorization. The term “prepaid” describes most of the products on the market today and is used more widely in current literature.⁷³

There are different types of stored-value or prepaid cards. Some cards are part of so-called “closed” systems, in which a consumer can use a card for a limited range of goods or services, typically provided by one merchant or one issuer. An example of a closed system would be a university photocopy card or a subway system metro/transit card. In these examples, a stored-value card can be used to purchase a narrow basket of services. At the university, a student would use his photocopy card to make copies in

71. Electronic Fund Transfers, 61 Fed. Reg. 19,696, 19,700 (May 2, 1996).

72. See *infra* note 86 and accompanying text; see also Fed. Reserve Bank of N.Y., Stored Value Cards: An Alternative for the Unbanked? http://www.ny.frb.org/regional/stored_value_cards.html (last visited Apr. 14, 2008).

73. There are a variety of applications for prepaid cards, including gift cards, payroll cards, flexible spending account cards, government benefit cards (such as food stamps), insurance claim cards, employee reward cards, travel cards, remittance payment cards, and transportation cards. Most prepaid cards serve a single purpose, but there are a few cases in which multiple prepaid functions are combined in one card. In addition, some cards—such as payroll cards, government benefit cards, and transportation cards—can be reloaded with value, whereas some cards cannot (such as insurance claim cards or gift cards). See generally Mark Furletti, *Prepaid Card Markets & Regulation* (Fed. Reserve Bank of Phila., Discussion Paper No. 04-01, 2004), available at <http://econpapers.repec.org/paper/fipfeddp/04-01.htm>.

the library. A subway rider would use his or her card for riding on the subway and perhaps also on a city bus.⁷⁴

“Open” systems are systems in which a stored-value card may be used as a cash substitute. The card is widely accepted by merchants and vendors in lieu of physical cash. An example of an open system would be a stored-value or prepaid debit card, in which the consumer may use the card at a wide range of merchants to pay for a large universe of goods and services. Some commentators make a distinction between open prepaid cards that operate as debit or ATM cards and prepaid purchasing cards that can be used widely throughout a country to purchase goods or services only, but are not redeemable as cash. Such cards are also referred to as universal gift cards.⁷⁵

“Mixed” or “semi-closed” systems are ones that have features of open and closed systems. A stored-value gift card program offered by a shopping mall might be an example of a mixed system. For example, a stored-value gift card might be accepted by multiple merchants within a shopping mall. This system is not entirely closed, because a wider array of merchants has agreed to accept the card as a means of payment. At the same time, the system is not open, as the card may have no use outside the walls of the shopping center.⁷⁶

In 1994, the Federal Reserve Board first contemplated whether Regulation E should apply to stored-value cards. The proposal generated a large number of comments, and the Board prepared an analysis of stored-value products and their treatment under Regulation E. Based on this analysis, the Board proposed new amendments to Regulation E in May 1996.⁷⁷ This proposed rule would have exempted many stored-value products, while others would have been covered under limited requirements. In 1996, the Federal Reserve Board did consider extending the application of Regulation E to stored-value cards more generally. The proposed amendments to Regulation E carved out a *de minimis* exception for cards issued for less than \$100.⁷⁸

74. See Richard Sullivan, Stuart Weiner, Terri Bradford & Fumaiko Hayashi, *The Many Uses of Stored-Value*, AT YOUR SERVICE (Fed. Reserve Bank of Kan. City, Kan City, Mo.) Fall 2003, at 2, available at <http://www.kansascityfed.org/PUBLICAT/PSR/Newsletters/storedvaluearticle.pdf>.

75. Judith Rinearson & Chris Woods, *Beware Strangers Bearing Gift Cards: Some Wholesale Advice for Your Retail Clients*, BUS. L. TODAY, Nov./Dec. 2004, at 57, available at <http://www.abanet.org/buslaw/blt/2004-11-12/woods.shtml>.

76. *Id.* at 58; Furletti, *supra* note 73, at 2–4.

77. See Electronic Fund Transfers, 61 Fed. Reg. 19,696, 19,696 (May 2, 1996).

78. *Id.* at 19,701; see also Sean M. O'Connor, *The De Minimus Exemption of Stored Value Cards from Regulation E: An Invitation to Fraud?*, 5 RICH. J.L. & TECH. 6 (1998), <http://law.richmond.edu/jolt/v5i2/oconnor.html>.

The Federal Reserve proposed to apply a *de minimis* exception to off-line accountable and online stored-value systems capable of storing only up to \$100. Offline unaccountable stored-value systems were excluded from the proposed amendment.⁷⁹ In the comments accompanying the proposed amendment, the Board justifies the *de minimis* exemption by simply stating that “[f]or a stored-value product limited to a relatively small amount of funds, the amount at risk would be sufficiently minimal that application of even modified Regulation E protections appears unnecessary.”⁸⁰ A final rule was never published.

Later in 1996, Congress directed the Board to conduct a study evaluating whether provisions of the EFTA should be applied “to electronic stored-value products without adversely affecting the cost, development, and operation of such products.”⁸¹ In response to this legislative mandate, the Federal Reserve Board issued a comprehensive report in 1997, which considered several approaches for the selective application of Regulation E’s protections to electronic stored-value products. At that time, the Board concluded that it was premature to regulate stored-value products, as such regulation might have an adverse impact on innovation in their development.⁸²

At present, if a consumer uses a prepaid or stored-value card, there is no legislatively-mandated error resolution procedure (with the exception of payroll cards). As some have noted, prepaid cards may be targeted at members of vulnerable populations, who would benefit from having specific error resolutions in place, as contrasted with pure contract remedies.⁸³ Payroll cards are subject to Regulation E as of July 2007.⁸⁴ This is not to say that prepaid cards other than payroll cards offer no consumer error resolution features. Branded cards (prepaid debit cards, for example) offer protections that mimic Regulation E through card association network rules,

79. O’Connor, *supra* note 78, ¶ 37; *see also* Electronic Fund Transfers, 61 Fed. Reg. 19,696, 19,701 (May 2, 1996) (“Under the proposed amendments, off-line unaccountable stored-value systems would not be covered by Regulation E. The proposed amendments do not provide an explicit exemption; instead, the definitions of systems that would be covered under the proposal do not capture off-line unaccountable systems.”).

80. Electronic Fund Transfers, 61 Fed. Reg. 19,696, 19,701 (May 2, 1996).

81. BD. OF GOVERNORS OF THE FED. RESERVE SYS., REPORT TO THE CONGRESS ON THE APPLICATION OF THE ELECTRONIC FUND TRANSFER ACT TO ELECTRONIC STORED-VALUE PRODUCTS I (1997), available at http://www.federalreserve.gov/boarddocs/rptcongress/efta_rpt.pdf.

82. *Id.* at 75.

83. Mark E. Budnitz, Martina Rojo & Julia Marlowe, *Deceptive Claims for Prepaid Telephone Cards and the Need for Regulation*, 19 LOY. CONSUMER L. REV. 1, 2 (2006).

84. *See* Electronic Funds Transfers, 71 Fed. Reg. 51,437, 51,438 (Aug. 30, 2006).

which provide more generous error resolution timeframes of up to 120 days.⁸⁵

Consumers may expect that such prepaid cards will operate like traditional debit cards, given their branding (e.g., as MasterCard or Visa prepaid cards), their name (sometimes referred to as prepaid debit cards) and their functionality (use at a POS terminal, for example, where credit and debit cards are also swiped).⁸⁶

Under a Federal Reserve Board Interim Final Rule, nearly all the provisions of Regulation E apply to payroll cards—with some important modifications.⁸⁷ The main modification is that employers or others providing payroll cards need not provide a printed periodic statement to employee cardholders.

A new § 205.18 of Regulation E provides financial institutions flexibility in providing account information to consumers. Financial institutions may elect to provide periodic statements under § 205.9 as they would for other accounts. As an alternative, however, institutions may instead:

- (1) Make balance information available through a readily available telephone line;
- (2) make available an electronic history of the consumer's account transactions, such as through an Internet web site, that covers at least 60 days preceding the date the consumer electronically accesses the account; *and*
- (3) provide promptly upon request a written history of the consumer's account transactions, covering at least 60 days preceding the date the institution receives the consumer's request.⁸⁸

Section 205.18(c)(4) establishes a rule for when the sixty-day period for reporting an error begins for purposes of Regulation E error resolution. The reporting period will be based upon how a consumer has obtained the account transaction history on which an error appears. A financial institution must comply with the error resolution procedures set forth in § 205.11 once the consumer reports the error in her account transaction history within the requisite sixty days. The sixty-day rule is measured in one of two ways:

- [I]f a consumer obtains transaction information electronically under § 205.18(b)(1)(ii), the 60-day period for reporting an error begins on the

85. Furletti, *supra* note 2, at 21 (stating that “most issuers explicitly provide strong error-resolution protection for at least” sixty days).

86. For an interesting presentation that poses questions about regulation and different types of stored value, see Sherrie L.W. Rhine, Sr. Economist, Fed. Reserve Bank of N.Y., Presentation at the 15th Annual Nat'l Consumer Protection Week Conf.: Stored Value Cards, Not Credit, Not Debit, What Are They? (Apr. 26, 2005), *slides available at* <http://www.bos.frb.org/consumer/conf/ncpw/2005/svc.pdf> (posing question as to whether consumers know that some stored-value cards have limited or no consumer protections).

87. Electronic Funds Transfers, 71 Fed. Reg. 51,437, 51,439 (Aug. 30, 2006).

88. *Id.* at 51,443.

date the account is electronically accessed by the consumer. If the consumer requests a written history of transactions under § 205.18(b)(1)(iii), the 60-day period begins on the date the institution sends the written history.⁸⁹

A consumer is deemed to electronically access an account once she “enters a user identification code or a password or otherwise complies with a security procedure used by an institution to verify the consumer’s identity.”⁹⁰

The periodic statement requirement is an important aspect of Regulation E’s consumer protections. Consumers’ duty to report errors is linked to receipt of their bank statement. When the Board considered whether to extend Regulation E requirements to Electronic Benefits Transfer programs in 1994, it carved out an exception to the requirement that financial institutions provide a periodic statement to consumers. With EBT transfers, financial institutions would not need to provide a periodic statement if: “(1) account balance information is made available to benefit recipients via telephone and electronic terminals and (2) a written account history is given upon request.”⁹¹ With payroll cards, the Board chose to replicate the same periodic statement exceptions it had applied in the case of EBTs.⁹²

The Federal Reserve Board revisited the issue of whether to extend Regulation E to all stored-value/prepaid card products or a broad class of general purpose prepaid cards, and some consumer group commentators urged the Board to apply Regulation E to all card products to which an individual might transfer some portion of his or her wages, even if such cards are not “payroll card accounts” offered by an employer.⁹³ These

89. *Id.* at 51,445.

90. *Id.* at 51,443.

91. Electronic Fund Transfer, 62 Fed. Reg. 43,467, 43,467 (Aug. 14, 1997).

92. The Board stated, in its official comments:

[T]he Board has concluded that it is appropriate to provide flexibility in connection with the periodic statement requirement for payroll card accounts. As was the case when the Board considered rules governing EBT products in 1994, the Board is persuaded at this time that the alternative methods of providing account transaction information currently made available by many payroll card providers can give payroll card users a means of tracking their account balances and transactions that is comparable to that provided by paper periodic statements. Moreover, information obtained via the telephone or on-line is typically updated on a daily basis, in contrast to periodic statements which only provide information as of the end of each statement cycle. Thus, consumers using telephone and on-line methods often have access to more timely information through these methods. Access to more timely information may be particularly critical to consumers who may need to track their account balances on a transaction-by-transaction basis to ensure they do not overdraw their accounts.

Electronic Funds Transfers, 71 Fed. Reg. 1473, 1476 (Jan. 10, 2006).

93. *See, e.g.*, Letter from Kat Aaron, Director, RYSE, Neighborhood Econ. Dev. Advocacy Project, to Jennifer L. Johnson, Sec’y, Bd. of Governors of the Fed. Reserve Sys. 2 (Nov. 19, 2004), *available at* <http://www.nedap.org/ryse/payrollcomments.pdf> (urging the Board to extend the amendment to cover prepaid debit cards markets or used as account substitutes); Letter from Consumers Union of

commentators asserted that such general spending cards are marketed as account substitutes and therefore should be covered under Regulation E.⁹⁴

Consumer groups also encouraged the Board to regulate stored-value products that might store important household assets, such as workers compensation, unemployment benefits, or tax refunds.⁹⁵ Ultimately, the Board did not expand the scope of the interim final rule beyond payroll cards.⁹⁶ As the Board noted, it will monitor the development of other card products and may reconsider regulation in the future.⁹⁷

Do stored-value/prepaid card issuers offer their users any error resolution features? This varies. One important question, of course, is whether a particular card is accountable either online or offline. On the one hand, branded prepaid cards are subject to network rules such that there is an error resolution procedure that is part of the card-processing system.⁹⁸ The

U.S., Inc., et al., to Jennifer L. Johnson, Sec'y, Bd. of Governors of the Fed. Reserve Sys. 2, 4 (Oct. 28, 2004), available at <http://www.consumersunion.org/pdf/payroll11004.pdf>.

94. Letter from Consumers Union, *supra* note 93, at 4.

95. *Id.* at 5.

96. The Federal Reserve Board of Governors stated:

Payroll cards are established directly or indirectly by an employer for the express purpose of receiving on a long-term basis, recurring payments of a consumer's wages, salary or other compensation. Accordingly, there is a greater likelihood that the account will serve as a consumer's principal transaction account, and hold significant funds for an extended period of time. In contrast, general spending cards are established by the individual consumer, and while the consumer might choose to deposit some portion of salary (as well as other funds) onto a general spending card, the consumer also may use these products like gift cards or other stored-value or prepaid cards. Under the latter situation, consumers would derive little benefit from receiving full Regulation E protections for a card that may only be used on a limited, short-term basis and which may hold minimal funds, while the costs of providing Regulation E initial disclosures, periodic statements and error resolution rights would be quite significant for the issuer. In addition, coverage of such products could impede the development of other card products generally. Similarly, although some card products may be used to transfer significant or important sums to a consumer, these products are generally designed to make one-time or a limited number of payments to consumers, and are not intended to be used on a long-term basis. Given these above considerations, the Board has determined to limit the scope of the interim final rule to payroll card accounts. The Board will monitor the development of other card products and may reconsider Regulation E coverage as these products continue to develop.

Electronic Funds Transfers, 71 Fed. Reg. 1473, 1475 (Jan. 10, 2006).

97. *Id.*; Donald J. Mosher & Joshua H. Kaplan, *Payroll Cards and Regulation E*, 2 J. PAYMENT SYSTEMS L. 583, 591 (2006).

98. For example, the Prepaid Visa RushCard, which was branded by rap producer Russell Simmons, provides the following procedure in the event of errors or questions about a card transaction:

Call or write to Customer Service as soon as you can, if you think your Card Balance is incorrect or if you need more information about a transaction

Whether calling or writing you must:

- (a) tell Customer Service your name and Card number;
- (b) describe the error or the transfer you are unsure about, and explain as clearly as you can why you believe it is an error or why you need more information;
- (c) tell Customer Service the dollar amount of the suspected error.

Starbucks card, which is a more limited purpose or closed system, but is accountable online if card holders register, also has an error resolution procedure:

We reserve the right to correct the balance of your Starbucks Card account if we believe that a clerical, billing or accounting error occurred. If you have questions regarding your transaction history or any correction, or if you dispute any transaction or correction that has been assessed against your Starbucks Card, please call our customer service department at 1-800-STARBUCC. We will conduct an investigation and communicate the results and correct any error that we verify as soon as we finish the investigation. If no error was found, we will communicate an explanation. We shall have no liability for any billing error unless you provide us notice within sixty (60) days of the date of the transaction in question. You should monitor your transactions and account balances closely.⁹⁹

Starbucks does mimic Regulation E in that it requires consumers to notify the company of alleged errors within sixty days of the transaction. This is less generous than Regulation E, which triggers a duty to report sixty days from receipt of a periodic statement, or in the case of payroll cards, after a consumer has accessed relevant transaction information, but makes sense given that this is a card primarily used to purchase coffee and food items. The Wal-Mart gift card, however, does not post any error reso-

If you provide this information to Customer Service orally, you may be required to send Customer Service your complaint or question in writing within 10 business days. Please note that any notice transmitted to any address other than the Customer Service address above, including but not limited to any e mail address or website, will not constitute valid notice. We will tell you the results of our investigation within 10 business days after we hear from you and will correct any error promptly. If we need more time, however, we may take up to 45 days to investigate your complaint or question (90 days if your complaint or question relates to a point of sale transaction or an electronic fund transfer transaction that was started outside any state, territory or possession of the United States, the District of Columbia or Puerto Rico). If we decide to do this, we will re-credit your Card Balance within 10 business days for the amount you think is in error, so that you will have the use of the money during the time it takes us to complete our investigation. If we ask you to put your complaint or question in writing and we do not receive it within 10 business days, we may not re-credit your Card Balance. If your claim involves an electronic fund transfer associated with your Card that took place within 30 days after its purchase, each 10 business day period referred to in this paragraph will be 20 business days and the 45 day period referred to in this paragraph will be 90 days. We will tell you the results within 3 business days after we finish our investigation. If we decide that there was no error, we will reverse the credit (if any) and send you a written explanation. You may ask for copies of the documents that we used in our investigation.

The Prepaid Visa RushCard, Terms & Conditions, https://www.rushcard.com/terms_cardHolder.aspx (last visited Mar. 31, 2008).

99. Starbucks, Card Terms, *available at* https://www.starbucks.com/customer/card_terms.asp (last visited Mar. 31, 2008) (billing errors and corrections).

lution procedures on its web site.¹⁰⁰ Other gift card issuers provide for a shorter period of reporting for error resolution.¹⁰¹

II. EXTENDING THE EFTA AND REGULATION E: CONVERGING TOWARDS UNIFORMITY

As stated in Part I, two things are occurring in the consumer payments arena. First, consumers are confused as to their rights and duties with respect to new types of payments as well as mechanisms which may involve multiple channels for processing.¹⁰² Second, payment systems are converging as different actors can convert payments from one form to another. The use of funds transfers is becoming a central piece of how a consumer payment is executed.

At present, error resolution rules are divergent. Checks are not subject to Check 21 and many types of stored-value cards are not subject to error resolution procedures. Moreover, time periods for payment products vary. Credit cards are governed by TILA and Regulation Z and have a sixty-day reporting window. Debit cards are governed by the EFTA and there is a sixty-day window with a right of recredit after forty-five days. Substitute checks have a forty-day window for reporting errors and for seeking recredit. Finally, the U.C.C. is silent and allows banks to impose much shorter time periods by agreement.¹⁰³ Is there a sound policy basis, or are the different regimes a product of differing Congresses?¹⁰⁴

Should there be greater uniformity in error resolution between consumer payment mechanisms? Mark Budnitz has done a thorough job of articulating the problem for consumers with the divergence in rules. As he has noted, "Requiring an error resolution procedure would mainly affect checks not subject to Check 21 and stored value cards."¹⁰⁵ He advocates for one unified rule setting forth the length of time a consumer has to notify

100. Wal-Mart, Gift Card Terms and Conditions, <http://www.walmart.com/catalog/catalog.jsp?cat=538430&fromPageCatId=538428&catNavId=538428> (last visited Mar. 31, 2008).

101. See, e.g., Simon Property Group Inc., MetaBank Simon Giftaccount Agreement, https://www.simon.com/giftcard/terms_and_conditions.aspx?giftaccount=1 (last visited Mar. 31, 2008) ("You must call within 30 days of the date of any transaction you are questioning.").

102. See also Mann, *supra* note 3, at 634 (providing anecdote of colleague who was unaware of distinction between chargeback rights with credit card as compared with debit card transaction). Mann also notes that "with the debit card market increasingly dominated by the PIN-less debit card markets by Visa and MasterCard, the distinction between the credit card and the debit card is almost invisible to all but the most sophisticated consumers." *Id.*

103. Budnitz, *supra* note 10, at 281.

104. Mann, *supra* note 17, at 694.

105. Budnitz, *supra* note 10, at 281.

his financial institution of an error.¹⁰⁶ Budnitz further recommend that the recredit rights under the EFTA and Check 21 should be extended to all types of payment systems.¹⁰⁷ But is confusion alone a reason for uniformity? Is there a theoretical argument to be made for greater uniformity?

There are some types of errors that may occur in any payments system, such as duplicate payments, payments made for incorrect amounts, omitted payments, and misdirected payments, to name a few. There needs to be a process for investigating and resolving those errors. As a baseline matter, common error resolution processes may inure to the benefit of consumers and financial institutions alike. Regulation, industry practice, or private rule-making can amplify how investigations should take place with respect to a particular technology. Regulation E sets timeframes within which parties must act and investigate. It does not, however, regulate the nature of the investigatory process.

Critics who oppose extension of Regulation E to other types of prepaid cards note that the full application of Regulation E would be costly—and often, the focus is on the periodic statement reporting requirement.¹⁰⁸ To the extent that Regulation E's periodic statement requirements are narrowed to require that a consumer have access to transaction information online or via telephone, businesses will have a lower compliance burden than the one faced by banks with respect to debit cards. Moreover, one could lower requirements even further, to require reporting within sixty days of a particular transaction record being made available, as is the case with Starbucks. The Federal Reserve has already eliminated the receipt requirement for funds transfers and debit card transactions under \$15. If this requirement were implemented for new types of payments, it would eliminate much of the burden that the industry fears.¹⁰⁹

106. *Id.*

107. *Hearing, supra* note 50, at 6. Both statutes require the financial institution to recredit the consumer's account if it cannot determine the validity of the consumer's claim of an erroneous transfer within ten days. 12 U.S.C. § 5006(c)(2)(B) (Supp. IV 2004); 15 U.S.C. § 1693f(a) (2000).

108. Steven Ritchie, *Will Regulators Burst the Prepaid Bubble?*, N.C. BANKING INST. 201, 219–22 (2005).

109. The Federal Reserve Board announced recently its approval of a final rule that creates an exception for transactions of \$15 or less from Regulation E's requirement that receipts be made available to consumers for transactions initiated at an electronic terminal. Electronic Fund Transfers, 72 Fed. Reg. 36,589, 36,590 (July 5, 2007). "The rule is intended to facilitate the ability of consumers to use debit cards in retail environments where making receipts available may not be practical or cost effective." Press Release, Bd. of Governors of the Fed. Reserve Sys. (June 28, 2007), available at <http://www.federalreserve.gov/newsevents/press/bcreg/20070628a.htm>.

A factor indicating that the time may be right for expansion of Regulation E's scope relates to existing market conditions. Branded prepaid cards offer error resolution procedures that resemble those provided under Regulation E. Even closed or mixed system cards, such as the Starbucks card, use processes that mimic Regulation E in terms of timelines for reporting errors. This shows that error resolution procedures are feasible for such types of products. Would it not be better, under those circumstances, to reinforce consumer expectations by mandating a similar error resolution procedure for prepaid cards that are either for general purpose or of a certain value?

It will be helpful for the Federal Reserve to monitor the application of Regulation E to payroll cards. To the extent that the modified notice and reporting requirements are less burdensome, it may be that general purpose card issuers should also be subject to the same rules. Many prepaid card issuers, however, weighed in against the expansion of Regulation E at the time the payroll card regulations were published for comment. To extend the scope of Regulation E further would require an examination of other prepaid card models to see how consumers are using them and when and how errors occur. In the interim, recent studies have shown that cards with a more general or open structure provide error resolution procedures that mimic Regulation E as a matter of industry practice.

Should there be a uniform error resolution standard for all types of consumer payments? What would uniformity do for consumer payments? For consumers, this may reduce confusion and increase the chance of trying new payment products. As Budnitz remarks: "Consumers also need uniform error resolution procedures to prevent undue confusion from the many different types of consumer payments that involve a consumer's bank account."¹¹⁰ If one sets aside stored-value cards, there may be a better case to be made for uniform error resolution mechanisms for debit cards, credit cards, and checks given the way in which these payment methods are converging and being used interchangeably at the point of sale.¹¹¹

While a lack of regulation may foster innovation, uniformity of consumer protections may also encourage consumer adoption of new payment methods. To the extent that uniformity exists with respect to error resolution, this may incentivize consumers to behave in a predictable and uniform manner with respect to any and all of their payment choices. This, in turn,

110. Budnitz, *supra* note 10, at 257.

111. Credit card error resolution is currently governed by Regulation Z, which includes a fair credit billing dispute resolution procedure. 12 C.F.R. § 226.13 (2007).

may provide for greater efficiency in consumer reporting and detection of errors. If a consumer knows she has sixty days to detect and report a payments error, for example, irrespective of the method she uses, she may be more vigilant in checking her periodic statements or other transaction records, creating a culture of responsibility.

Is consumer confusion enough to justify uniformity? Surely not. But when confusion is accompanied by convergence, the answer may change. It may be more efficient now to mandate a universal rule, which allows different payment systems to piggyback on one another, or to allow different parties to convert transactions as is the case with electronic check conversions. When consumers are confused, industry players, especially non-banks, are also confused. Trying to craft uniform but less burdensome processes may provide for an efficiency and predictability that will help new entities compete and offer consumers a familiar type of error resolution process.

The expansion of Regulation E/EFTA provisions to payroll cards and to check conversions is one step towards uniformity and harmonization. The EFTA error resolution procedures, which apply to a wider range of transactions, could serve as a useful model for other payment systems. The procedures would need to be modified in some respects, especially with respect to the issue of periodic statement reporting.¹¹²

Is uniformity desirable? Peter Alces and others have written about the desirability of uniformity in payments law, but have also criticized previous attempts to harmonize payments law with something like a Uniform New Payments Code (UNPC).¹¹³ Alces's critique focused on issues such as stop payment and reversibility under the UNPC. He did, however, note that effective codification of payment law involves "the identification of common denominators in seemingly different systems."¹¹⁴

Clayton Gillette has also examined the discrepancies for checks and credit cards when dealing with fraud in payment systems.¹¹⁵ Gillette notes that "[p]recise risk allocations create clear liability rules that minimize the

112. "In particular, a more precise definition of exactly what constitutes an 'error' is needed, and the extent to which banks must investigate allegations of error outside their own 'four walls' must be developed." Note, *Consumer Protection and Payment Systems: Regulatory Policy for the Technological Era*, 98 HARV. L. REV. 1870, 1880 (1985).

113. E.g., Peter A. Alces, *A Jurisprudential Perspective for the True Codification of Payments Law*, 53 FORDHAM L. REV. 83, 87-90 (1984).

114. *Id.* at 103.

115. Gillette, *supra* note 13, at 184.

cost of the enforcement process . . . [and] facilitate coordination by ensuring that transactors follow similar patterns of behavior.”¹¹⁶

As Ronald Mann has described, payments law must resolve four fundamental issues: who bears the risk of unauthorized transactions, how error claims should be resolved, when payments are made so as to discharge the underlying liability, and when payments can be reversed.¹¹⁷ In his view, the distinction between the first three questions and the fourth is that the first three “should be resolved based on the nature of the underlying technology.”¹¹⁸

As for error resolution, the types of situations that are likely to cause errors, as well as the mechanisms for detecting and responding to errors, are likely to “depend on the technology used to clear and process payments.”¹¹⁹ Therefore, it would make sense that there would be a different rule for those transactions that are processed electronically from those that are processed solely by paper.¹²⁰ Mann notes, however, that the move from paper to electronic processing might well eliminate any meaningful difference.¹²¹ At present, the move toward check substitution and conversion means that more transactions are processed electronically. Given this convergence, uniform error resolution may be desirable.¹²²

To the extent that the payments in question are also taking place over similar networks (with the exception of some checks that are not converted), it may well make sense to create operator incentives to make advances in technology that will avoid or detect error. As Mann notes, in our legal system regulators have taken the view that for most high technology payment systems, it is appropriate to allocate the risk of loss to the system operator.¹²³ He argues that it would be more sensible to develop rules for

116. *Id.* at 186.

117. Mann, *supra* note 3, at 638.

118. *Id.*

119. *Id.* at 639.

120. *Id.*

121. *Id.*

122. There are also moves to convert some electronic payments into checks and to process them accordingly. This demonstrates that payment systems are becoming more interdependent, as conversion occurs in both directions with respect to checks and funds transfers. One example is the Deposited Check Truncation (DCT) pilot, recently announced by NACHA. The DCT pilot will use the ACH network to collect low-value consumer checks. Unlike the current ACH check conversion services (e.g. POP and ARC, which are viewed as electronic fund transfers under Regulation E), NACHA intends the collection and return of checks in the DCT scheme to be governed by traditional check rules under the U.C.C. (except as varied by agreement of the participants under the pilot rules). *See* Press Release, Nat’l Automated Clearing House Ass’n, DCT Pilot Set to Launch 1st Quarter 2008, <http://dct.nacha.org/>.

123. Mann, *supra* note 3, at 638.

fraud and error resolution “justified by the fact the transactions are processed and cleared in an electronic way.”¹²⁴

This article focuses on the issue of error resolution—whether we can impose a uniform standard across payment systems.¹²⁵ Consumer confusion, to the extent it exists with respect to retail payments, may indicate market failure. As Robert Cooter and Ed Rubin have noted:

[I]n an operating market, private agreements between parties will generally produce economically efficient results without the need for legal intervention. Intervention becomes necessary, however, when the market fails to produce these efficient results on its own. Rules that are designed to achieve economic efficiency in payment law, therefore, should enforce agreements between private parties when no market failure has occurred. When market failures exist, legal rules can improve upon private agreements if they are designed with the goal of minimizing costs in mind.¹²⁶

As they have also pointed out, disproportionate negotiation costs and asymmetric information create market failures in the allocation of fraud, forgery, and error losses in consumer payment contracts.¹²⁷ When there is market failure, regulatory solutions are often needed to bridge the gap and rectify any inefficiencies. Efficient legal rules assign liability to whichever transacting party can reduce losses at the lowest cost.¹²⁸ As Cooter and Rubin point out, “Recent technological innovations, such as automated check processing, have altered the cost of precaution and will continue to do so in the future.”¹²⁹ Thus, while the loss might be allocated to financial institutions and other payments providers, it would follow that there should be an error resolution process in place, which would require the institutions to take steps in a timely fashion. Error resolution becomes an intrinsic part of any efficient loss-allocation scheme.

Cooter and Rubin have concluded previously that “the allocation of fraud, forgery and error losses in consumer payment contracts provides a clear case of market failure.”¹³⁰ If the allocation of losses is a situation of market failure (i.e., the market has not provided a rational system of loss

124. *Id.* at 639.

125. *See also* Budnitz, *supra* note 10, at 257 (stating that in addition to uniform notice requirements, consumers also require uniform error resolution procedures).

126. Robert D. Cooter & Edward L. Rubin, *A Theory of Loss Allocation for Consumer Payments*, 66 TEX. L. REV. 63, 68 (1987).

127. *Id.* at 69.

128. *Id.* at 73–78.

129. *Id.* at 74–75.

130. *Id.* at 69.

allocation), one could extend that to the procedural framework in which the loss allocation takes place.

Consumers are likely to be unaware of the procedures that need to be invoked in order to exercise remedies that are afforded to them because of disproportionate costs of exercising their rights and asymmetric information (e.g., they neither actively negotiate the terms of their service agreements with payments providers nor review such agreements once executed). Individual consumers will typically not expend the time and effort to identify and understand the specific terms of the account agreement with their financial institutions.¹³¹ Cooter and Rubin persuasively argue that consumers do not make informed choices about relevant terms when they contract with financial institutions. By contrast, a financial institution will expend considerable effort in formulating an agreement that furthers its own interests.¹³²

Another example of market failure relates to funds availability schedules. Prior to the enactment of the Expedited Funds Availability Act, banks did not have to credit, according to any mandatory time schedule, their customers' accounts for checks that were deposited. There was no built-in incentive for depository institutions to act quickly with respect to funds availability.

The funds availability problem arises, as might be expected, where individual consumers are involved. Very few consumers have their own money managers (those who do are probably not entitled to be called consumers), and only a few more have the expertise to manage their own funds as a business does. The vast majority are ignorant about the issue. They do not know whether their respective banks allow interest to accrue from the time of provisional credit or rather postpone the accrual of interest until final payment. Similarly, they are not aware of hold policies until confronted with an immediate problem of liquidity. They are thus incapable of evaluating differential bank performance, which gives banks no incentive to compete or otherwise make concessions to consumer desires. This phenomenon, of course, is known as a market failure—in this case the failure of otherwise competing banks to create a competitive market for funds availability services.¹³³

In response to the market failure, Congress enacted the Expedited Funds Availability Act and the Federal Reserve implemented this through Regulation CC. This is an example of an overlay of federal law creating a

131. *Id.* at 68–70 (discussing issues such as the cost of negotiation and asymmetric information between financial institutions and consumers).

132. *See id.* at 80–81.

133. Robert D. Cooter & Edward L. Rubin, *Orders and Incentives as Regulatory Methods: The Expedited Funds Availability Act of 1987*, 35 UCLA L. REV. 1115, 1129–30 (1988).

process and set of timelines for funds availability.¹³⁴ The EFAA requires a financial institution to disclose its funds availability policy to consumers. The statute also created a mandatory availability schedule.¹³⁵ This statute and Regulation CC focus on procedural requirements and leave issues such as the contractual obligation of the parties and the required standard of care to common law.¹³⁶

The issue of funds availability can be compared to the situation of error resolution. Delay in error resolution can benefit a bank or other payments provider, but “the customer is harmed by it. The components of this harm are the reduced access to funds, and, in some cases, monetary costs and personal frustration resulting from accidentally-bounced checks.”¹³⁷

Cooter and Rubin advocate that for funds availability, market-stimulating legislation would be a preferred alternative to the funds availability rules, which they view as market-displacing.¹³⁸ With error resolution, it would be difficult to come up with market-stimulating incentives, because error resolution is not “priced” in the way that check collection and processing is. Ultimately, however, Cooter and Rubin viewed the funds availability situation as one where market failure called for some sort of intervention to create better and more efficient methods for check processing and funds availability.

134. *See id.* at 1130.

135. *Id.* at 1141–42.

136. *Id.* at 1154 (“Regulation CC is essentially a set of orders, or commands, and thus follows our traditional model of law. It specifies when funds should be made available (to the extent that this is not already specified in the Act), what should be disclosed, and how such disclosures should be made. It also specifies rules governing notice of dishonor and return, using the same form as standard statutory provisions, but at a level of detail that is generally restricted to administrative regulations. To be sure, many of these rules focus on the sort of operational concerns that the UCC ignores; they deal with mundane matters like the bank’s courier services, the placement of its indorsement stamp, and the precise form of the availability disclosures, rather than the contractual obligations of the parties, their required standard of care and other topics more closely allied to common law. While this reflects the administrative authorship of the rules, the form and structure of these rules differ little from age-old provisions like the Statute of Frauds.”).

137. *Id.* at 1158–59 (“If customers were wholly rational and had no liquidity problems, they would adjust to delays by holding more money in their accounts. The cost of delayed availability to customers under these conditions would be the value of the cushion that they keep in their accounts to protect against possible overdrafts. The size of this cushion would be determined by two considerations: predictable delay and uncertainty. Predictable delay in processing a check would cause customers to increase their account balances by the instrument’s face value for the duration of the delay (*e.g.*, a delay of two days in processing a \$10 check causes account holders to keep an extra \$10 in their accounts for two days). Uncertainty would extend the length of time for keeping a cushion in the account. If processing a \$10 check will be delayed for at least two days and perhaps by as long as five days, the account holder would keep an extra \$10 in the account for longer than two days, but probably fewer than five days.”).

138. *Id.* at 1178–79.

With respect to error resolution on consumer payments, absent obligatory processes, certain entities do not have to act expediently or efficiently. At the same time, those same businesses can impose quick reporting deadlines for consumers with respect to error. Are Regulation E and the EFTA a better way forward?

The EFTA and billing disputes require a financial institution to respond to consumer complaints and to correct the bill or provide an explanation for its refusal to do so. Cooter and Rubin have argued that federal law could be further strengthened and the U.C.C. transformed “if the institution were required to reverse a charge whenever a consumer asserted that it was erroneous.”¹³⁹ They describe these processes as creating an “obligatory dialogue between a consumer and the financial institution” such that “[c]onsumers who think the institution has made a billing error are required to notify the institution, and provide the information necessary for the institution to investigate their claim. The financial institution is then obligated to respond, either by making a correction or explaining why no correction is required.”¹⁴⁰

This mandatory dialogue, between a consumer and a financial institution, promotes efficiency and responsible behavior for both parties. A consumer needs to be vigilant at reviewing account statements. Financial institutions must be vigilant in investigating errors and responding to consumers.

What about the economic aspects of error resolution rules? Cooter and Rubin also focus on three important considerations when deciding what type of loss-allocation rules should be deployed for consumer payments: loss spreading, loss reduction, and loss imposition.¹⁴¹ These factors help to determine what type of rules will allocate losses in an efficient manner.

With respect to loss spreading, Cooter and Rubin note that the loss-spreading principle favors assigning liability for a loss to the party that can achieve risk neutrality at the lowest cost.¹⁴² The loss-spreading principle favors imposing liability on financial institutions that can invest in precaution, innovation, and responsiveness with respect to fraud and error: “For example, when a bank incorrectly encodes the magnetic numbers on the bottom of a check, which results in an overpayment, the bank is clearly in the best position to prevent the loss, because check encoding does not in-

139. Cooter & Rubin, *supra* note 126, at 116.

140. *Id.* at 116 n.195.

141. *Id.* at 70.

142. *Id.* at 72–72.

volve consumers at all.”¹⁴³ With respect to loss reduction, banks and other payment providers are cheaper cost avoiders. They can invest in technology that would reduce detect errors.¹⁴⁴

If the bank should invest to prevent the loss, should the bank also have an incentive to act to investigate error? In other words, procedural duty to act would further the goals of the loss-imposition principle. Under Article 4, consumers have a duty to act quickly but banks have no corresponding duty. Regulation E requires banks to affirmatively commence error resolution in a timely fashion. Thus, government intervention requires responding to errors, and this in turn may prompt efficiency in error resolution procedures as well as error detection measures.

The loss-imposition principle favors rules where losses are allocated to avoid expensive litigation and to avoid under-enforcement of such rules.¹⁴⁵ Thus, this principle favors rules that are simple and clear, such as a strict liability rule with a capped amount of damages.¹⁴⁶ In some instances, as Cooter and Rubin point out, this involves rules which require bilateral caution on the part of both parties in a financial transaction. Thus, consumers and financial institutions may both bear some responsibility to take precautions to prevent loss.¹⁴⁷ Regulation E requires both the bank and the consumer to act within designated timeframes; if they fail to do so, their claims may be precluded. While the use of procedures from Regulation E does not impose losses on either party, it creates rules that are simple and that emphasize bilateral caution.

Cooter and Rubin have examined transactions which they refer to as “false positive” payments. These are situations where checks are wrongly paid by the bank or paid for the wrong amount.¹⁴⁸ Their description of “false positive” payments by a bank replicates a more general category of “errors” which may occur in the retail payments situation—instances where a consumer notices a duplicate payment, overpayment, or an incorrect payment that has been made out of his account. Cooter and Rubin note that financial institutions should be at least partially liable for every loss result-

143. *Id.* at 76.

144. *Id.* at 75–77.

145. *Id.* at 84.

146. *Id.* at 85.

147. *Id.*

148. *Id.* at 86.

ing from a false positive and totally liable for those losses that the consumer cannot efficiently prevent.¹⁴⁹

They further indicate that “[t]he current law governing false positives that occur during processing is generally consistent with this rule. If a financial institution pays the wrong person through a processing error, and that person keeps it, the financial institution will be liable.”¹⁵⁰ One other type of processing error can cause either false positives or false negatives. Encoding errors occur when a depository bank encodes the wrong sum in the magnetic numbers placed on the bottom of a check resulting in an overpayment or underpayment to a payee.¹⁵¹

Timeframes can also impact loss allocation, with delay causing as much loss as an incomplete or failed payment.¹⁵² One answer to this problem may be to establish statutory time limits for payments.¹⁵³ If loss-imposition rules favor placing the loss on the financial institution in those circumstances—the absence of clear error resolution duties and timeframes may weaken this principle. Consumers may underreport errors when there is (i) no clear procedure in place for correcting or investigating error, or (ii) where they are unsure about what rules govern the transaction for which the error occurred.

If Regulation E-type dispute resolution was extended to checks and to all prepaid cards, would this lead to a spike in unwarranted consumer complaints? The answer is likely to be no. In electronic payment systems, repeat offenders (i.e., consumers who intentionally try to “game” the system by filing error reports) can be discovered and their contracts terminated.¹⁵⁴

An example of this comes from the credit card sector. As two other commentators, Andrew Morriss and Jason Korosec, point out:

In the payment system context, there are also opportunities for gaming behavior. For example, if a consumer complains about a charge, during the dispute period the amount in dispute is temporarily debited from the merchant’s account and credited back to the consumer. This provides the consumer with additional credit, since charges are not applied to the account during the dispute. (Once the dispute is resolved, the temporary debits and credits are either reversed or made permanent.) Consumers who repeatedly game the system, however, self-identify themselves to

149. *Id.* at 90, 97.

150. *Id.* at 111.

151. *Id.*

152. *Id.* at 96.

153. *Id.*

154. Andrew P. Morriss & Jason Korosec, *Private Dispute Resolution in the Card Context: Structure, Reputation, and Incentives* 9 (Case Research Paper Series in Legal Studies, No. 05-12, 2005), available at <http://ssrn.com/abstract=735283>.

their card-issuer. Since the issuer bears some of the costs from consumer complaints, these consumers' poor reputation for honesty can be a basis for the issuer to cancel the consumers' cards. The distinctive feature of card-based payment systems is their ability to make use of the parties' reputations in controlling attempts to game the system.¹⁵⁵

Has the time come to extend Regulation E to other types of payment mechanisms? For example, should the Board regulate general purpose or large sum prepaid cards beyond payroll cards? To the extent that P2P funds transfers out of non-bank accounts are covered, it is hard to distinguish between a prepaid debit card and a PayPal funds transfer. In both, consumers are accessing a funded account (one linked to a device, the other stored online) to pay for goods and services. Mann has argued persuasively about the lack of a real credit/debit distinction. Is there really a distinction to be made between a PayPal account and a prepaid debit card?

Mann argues that the differences between credit card consumer protection and debit card consumer protection "do not map well to the common-sense transactional distinction."¹⁵⁶ As he notes, the distinctions only decrease with "the continuing convergence in the functions of the two products."¹⁵⁷ Almost half of consumers use their credit card as a "convenience device" and pay off their entire bill every month.¹⁵⁸ As an illustration, he notes that some credit cards have both credit and debit features, making it "harder to justify the availability of the right to withhold payment turning on the way in which the consumer interacts with the merchant's payment terminal."¹⁵⁹ Mann also notes that some of the distinctions between TILA (or Regulation Z) and the EFTA (or Regulation E) can be explained simply by the fact that two different Congresses enacted these laws and that there is no policy basis for differing definitions of billing errors.¹⁶⁰

This article does not address the extension of Regulation E to credit cards, or the expansion of TILA/Regulation Z debit cards or other forms of electronic funds transfers. Ronald Mann has argued persuasively about the lack of importance in the credit/debit distinction and the desirability of expanding TILA coverage to debit card transactions. There also remains a question as to whether risk allocation for unauthorized transactions should be the same for credit cards, debit cards, and checks. This article focuses on

155. *Id.*

156. Mann, *supra* note 17, at 693.

157. *Id.* at 694.

158. *Id.*

159. *Id.*

160. *Id.*

the equivalence of systems that allow for electronic funds transfers and the fact that errors may result. At the same time, harmonizing error resolution for funds transfer and debit cards is feasible given that the current procedures for credit and debit are similar but not identical.

CONCLUSION

In conclusion, there are various factors that indicate that a common error resolution procedure for retail payment systems would be beneficial—including market failure, creating an incentive with respect to loss prevention, and using loss allocation to make procedures more efficient. In the absence of uniformity, what can be done about error resolution in sectors that fall outside of the federal payments regulatory structure? As I have noted in a previous essay, the use of licensing regimes in the form of safety and soundness licensing for prepaid card issuers and payment intermediaries may serve to enforce some mandatory error resolution standards.¹⁶¹ State regulators could require entities such as PayPal or non-bank issuers of prepaid cards to maintain adequate error resolution procedures as part of a larger safety and soundness regime. Some commentators remain skeptical of light touch regulation at the state level. State regulators, however, could look to existing industry standards, which often mimic Regulation E processes and create a safe harbor for entities that comply with Regulation E or some other standard that is accepted by the industry.

Mann has noted that the Uniform Money Services Act (broadened to cover EBPP) might foster a useful path for the time being.¹⁶² He does not, however, address the problem of piecemeal state regulation. Co-regulation may be a useful solution that ultimately leads to greater uniformity in error resolution among payment systems.

161. Anita Ramasastry, *From Consumer to Person? Developing a Regulatory Framework for Non-Bank E-Payments*, in CONSUMER PROTECTION IN THE AGE OF THE "INFORMATION ECONOMY" 313, 328 (Jane K. Winn ed., 2006).

162. Mann, *supra* note 17, at 705–06.