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PUTTING THE CARDS BEFORE THE PURSE?: DISTINCTIONS, DIFFERENCES, AND DILEMMAS IN THE REGULATION OF STORED VALUE CARD SYSTEMS

Walter A. Effross*

Table of Contents

I.	TYPES AND FEATURES OF STORED VALUE CARDS	323
	A. Smart Cards vs. Magnetic Stripe Cards	328
	B. Reloadable vs. Disposable Stored Value Cards	330
	C. Closed vs. Open Stored Value Systems	331
II.	INTERVENING IN FINANCIAL AND TECHNOLOGICAL	
	EVOLUTION	332
III.	THE ELECTRONIC FUND TRANSFER ACT AND	
	REGULATION E	336
	A. History	
	1. EFTA	
	2. Issues of Regulatory Timing	
	3. Regulation E	
	B. "Accounts"	
IV.	PROPOSED AMENDMENTS TO REGULATION E	
	A. Off-Line Unaccountable Stored Value Systems	348
	B. Off-Line Accountable Stored Value Systems	
	C. On-Line (Accountable) Stored Value Systems	352
V.	COMMENTS ON PROPOSED REVISIONS	
	A. Criticism of Board's Treatment of "Account"	355
	1. No Segregation of Funds	355
	2. No Ownership Interest in Bank's Obligation	
	3. Extension, Location, and Relevance of Transactional Records	357
	4. No Consumer Expectation of Account	358
	B. Criticism of the Accountable/Unaccountable Distinction	359
	1. Operational Difficulties	
	2. Divergence from Consumer Expectations	360
	C. Criticism of the On-line/Off-line Distinction	
	1. Operational Difficulties	
	2. Divergence from Consumer Expectations	362
	3. Incentive for Designers to Favor Off-line Systems	
VI.	THE FDIC GENERAL COUNSEL'S OPINION NO. 8	363

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A. FDIC Classification of Stored Value Systems	4
1. Bank Primary - Customer Account Systems 36	5
2. Bank Primary - Reserve Systems	5
3. Bank Secondary Systems	7
B. Comments on the Opinion	7
B. Comments on the Opinion	
BULLETIN 96-48	0
III. REFINING THE REGULATION OF STORED VALUE	
CARD SYSTEMS 37	1
A. The Place of Analogies	2
1. Models of Value Transfer and Value Loss: Stored Value is	
Not Cash, Personal Check, or Debit Card	2
2. Models of Dishonor and Discharge: Stored Value is Not	
Personal Check or Goods	3
B. General Principles	5
1. Need for Federal Regulation	
a. A new payment systems technology warrants federal regulatio	
in direct proportion to (i) the degree that its apparent departur	
from existing legal models creates legal uncertainty about th	
risks borne by the parties, and (ii) the aggregate value of th	
affected transactions	
b. A new payment systems technology warrants federal regulatio	
in inverse proportion to the degree that affected participants i	
commerce are able and likely to bargain fairly around the	
legal uncertainties created by the technology 37	6
2. Technology-Neutrality	8
a. New regulation should not unnecessarily undermine th	
development, adoption or implementation of regulated payment	
technologies	
b. New regulation should focus on the underlying purposes of	ρf
payment mechanisms as reflected by the technology	
employed	8
3. Adjustment of Risks	0
a. Although risks should generally be borne by the party best abl	le
to minimize the loss to the system, the card issuer may have a	n
incentive to adjust such risks in order to subsidize consume	er
adoption of the system	0
b. Consumers' reasonable expectations of liability should be	
met	2
C. A New Proposal 38	3
1. Collapse the Board's Two Fuzzy Distinctions into One Clear	
One	3
a. Abandon the Accountable/Unaccountable Distinction 38	3
b. Clarify the On-line/Off-line Distinction 38	4
2. Exempt Off-line Systems from the Application of	
Regulation E	4
3. Apply Regulation E Only to On-line Systems With Stored	
Value Exceeding a De Minimis Level	
4. Allow the Parties to Contract for Certain Non-Default Arrangemen	ts

	in On-line	Systems	With	Store	d Value	Exceed	ing a	Secor	id, High	er
	Threshold								38	35
IX. CON	CLUSION .								38	35
APPEND	IX								38	37
CHART C	ONE			. .					39	€1
CHART T	ow								39) 3
CHART T	HREE		 .					. .	39) 4
CHART F	OUR								39	96
CHART F	IVE								39) 7

A village elder of an earlier era, so the story goes, was asked how the telegraph worked. Lacking any detailed scientific understanding, he responded that in conveying messages the network of telegraph wires acted like the body of a giant horse: when the horse's tail was pulled in the sender's village, its head would whinny in the receiver's village. Upon being challenged to explain the operation of the "wireless telegraph" or radio, the elder confidently asserted, "it's just the same -- but without the horse."

Today's consumers, developers, issuers, and regulators of stored value cards are equally hard-pressed for accurate analogies in discussing the legal implications of payment systems in which financial value resides in a magnetic stripe or integrated circuit rather than in hard currency or a traditional negotiable instrument. The profusion of types and features of stored value card systems¹ renders simple comparisons to cash, checks, credit cards, debit cards, or even gift certificates at best somewhat misleading, and at worst, as in the telegraph story, prone to implosion.²

Yet consumers' increasing use of these devices, a lack of relevant caselaw, and the growing intensity of regulatory attention to this area have highlighted fundamental disagreements about the proper correlations and categorizations of stored value cards. In addressing such issues as the extent of consumer disclosure required by card issuers and the degree to which the money paid by a consumer for such a card is insured under

^{1.} This Article refers to "stored value card systems" or "stored value systems" to indicate that the cards themselves are only one component of larger payment systems that include: devices that dispense and/or add value to cards; card readers that indicate the value remaining on a card; point-of-sale devices (usually including the functions of card readers) that deduct value from a consumer's card, possibly after obtaining authorization from the issuer of the card, and store the value on behalf of the merchant; and financial or other institutions that issue the cards. *Cf. Joel Kurtzman*, The Death of Money 11 (1995) (noting that "[m]oney has been transmogrified. It is no longer a *thing*, an object . . . it is a *system*. Money is a network that comprises hundreds of thousands of computers of every type, wired together").

^{2.} See, e.g., Patricia Brumfield Fry, Negotiating Bit by Bits: Introducing the Symposium on Negotiability in an Electronic Environment, 31 IDAHO L. REV. 679, 685 (1995):

Attempting to fit electronic commercial practices into paper-based systems or concepts resembles nothing so much as trying to force a round peg into a square hole. Either it 'just won't go' or, if the peg is forced into the hole, both end up so distorted as to lose their value.

Id. But see Walter Wriston, Money: Back to the Future?, WALL St. J., Nov. 24, 1995, at A8 [hereinafter Back to the Future?]. The former chairman of Citicorp observed that:

Smart cards combine features of all of the following: automatic teller cards that let you access your bank account and draw cash; [credit] cards that permit you to buy now and pay later; and debit cards that charge an account at the time of purchase In effect, the card is an electronic traveler's check, but one that makes exact change.

Id. The various relevant features of these mechanisms of payment are set out in Chart 1 infra pp. 391-92.

the Federal Deposit Insurance Act,³ federal agencies have developed divergent classification schemes for stored value systems. At the same time, representatives of the banking profession and card technology industry have suggested that, in light of the rapid evolution of and nascent domestic market for these systems, all regulatory efforts are premature.

Part I of this Article discusses the different types and features of stored value cards. Part II examines the underlying tensions concerning the timing and extent of regulation in this area. Part III reviews the legislative history and relevant provisions of the Electronic Fund Transfer Act and Regulation E, particularly with regard to arguments with respect to regulatory timing. Part IV analyzes the revisions proposed in May 1996 by the Federal Reserve Board of Governors (the Board) to apply Regulation E to stored value systems. Part V evaluates the responses submitted to the

3. Other issues related to stored value cards include: seignorage; the card issuer's bankruptcy or insolvency; credit and other settlement risks; money-laundering; and reserve requirements. Hearings Before the Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services, 104th Cong. 95-96 (1995) [hereinafter Hearings] (testimony of Alan S. Blinder, Vice Chairman of the Federal Reserve Board of Governors). To this list of concerns the Comptroller of the Currency added: isolating breakdowns that might otherwise overwhelm the financial system; the impact of emerging payment systems on the disadvantaged; the potential monopolization of advanced mechanisms for payment services; and the adjustment of monetary policy to take account of such services. Id. (testimony of Eugene A. Ludwig, Comptroller of the Currency).

A recent report by the United States Treasury's Financial Crimes Enforcement Network ("FinCEN") separated these issues into five categories. FINANCIAL CRIMES ENFORCEMENT NETWORK, UNITED STATES DEPARTMENT OF THE TREASURY, EXPLORING THE WORLD OF CYBERPAYMENTS: AN INTRODUCTORY SURVEY 16-25 (1995). Category 1, "Clearly difficult problems for government," includes enforcement, money laundering, various tax issues, criminal law, privacy, data protection, fraud, and negligence; Category 2, "Problems whose resolution depends on how the new systems are characterized," includes jurisdiction over Internet transfers, contract formation, law of sales, negligence, electronic fund transfers, truth in lending, and the Community Reinvestment Act; Category 3, "Problems of basic characterization," includes currency, bank safety and soundness, and escheat; Category 4, "[e]conomic issues that underlie problems of basic characterization," includes basic definitions, issuance, value of dollars, money supply, velocity, and seignorage; and Category 5, "General computer law issues," includes intellectual property, patents, and copyright.

Noting the broad range of these topics as well as the number of interested government agencies, the report's authors were moved to remark, "[w]e suspect everyone is interested in resolving rather than simply identifying issues. But that is not easy when the relationship among the issues makes it difficult to see which is the chicken and which is the egg, let alone which comes first." *Id.* at 15.

- 4. Electronic Fund Transfers (Regulation E), 61 Fed. Reg. 19,696, 19,698 (1996) (to be codified at 12 C.F.R. pt. 205) (proposed May 2, 1996) [hereinafter Proposal]. This Article addresses that portion of the Proposal that would add to the Regulation a new section, § 205.16, to govern "Certain stored-value services." *Id.* at 19,704-705. Not discussed herein are the Board's proposals to extend the time periods for resolving errors that involve new accounts, *id.* at 19,698, and to allow financial institutions to satisfy electronically, through "electronic communications" displayable (as on a computer screen) as visual text, Regulation E's requirements on the provision of information in writing, *id.* at 19,697.
- S. 1270, 104th Cong., (1995-96), introduced on September 25, 1995, would have exempted stored value cards from the Electronic Fund Transfer Act by creating specific exemptions for "any card, device, or computer that may be used by a person to pay for a transaction through the use of value stored on or assigned to, that card, device, or computer." As of February 1997, that bill was still pending before the Senate Committee on Banking, Household and Urban Affairs. Other bills to the same effect are also in legislative limbo. See Proposal at 19,698 (citing H.R. 2520, 104th Cong. § 443 and S. 650, 104th Cong. § 601 (1995)) as "still pending in Congress".

Board's request for comment:⁵ in late September 1996 consideration of its proposals was postponed pending the results of a report to be prepared by the Board.⁶ Part VI addresses the conclusions of the Federal Deposit Insurance Corporation (FDIC), and the reaction of the financial community, concerning the insurability of funds held by depository institutions in exchange for stored value cards.⁷ Part VII reviews the recommendations of the Office of the Comptroller of the Currency on consumer disclosures with regard to stored value cards.⁸ Finally, Part VIII suggests principles and practices to develop a more effective set of regulatory classifications of stored value systems.

I. TYPES AND FEATURES OF STORED VALUE CARDS

Stored value cards, also known as prepaid cards or value-added cards, "maintain, typically in a computer chip or magnetic stripe, a 'stored value' of funds available to the consumer for access primarily at retail locations. The balance recorded on the card is debited at a merchant's POS (point-of-sale) terminal when the consumer makes a purchase." The value carried on such cards "can be 'spent' or transferred to individuals and/or merchants in a manner that is similar to spending paper money or coins."

However, in testimony before Congress, the Vice Chairman of the Board of Governors of the Federal Reserve System has indicated that "[i]t seems premature... to legislate a blanket exemption from EFTA without first exploring some of the basic issues raised by these new payments mechanisms." *Hearings, supra* note 3 (testimony of Alan S. Blinder) (discussing the Board's plan to unveil "within a few months" a proposal for application of Regulation E to stored value cards).

- 5. Comments were originally due on or before August 1, 1996. See 61 Fed. Reg. 19,696 (1996). This deadline was later extended to September 6, 1996, "to give the public additional time to provide comments." 61 Fed. Reg. 37,229 (July 17,1996). The Board of Governors received 115 comment letters addressed to William W. Wiles, Secretary, Board of Governors of the Federal Reserve System. For the purposes of this Article, the following form of citation is used to refer to all such comment letters: Comment Letter of [commentator] [page number] (date of letter).
- 6. An omnibus consolidated appropriations bill, signed on September 30, 1996 by the President, directed the Federal Reserve Board to "conduct a study of electronic stored value products which evaluates whether provisions of the Electronic Funds Transfer Act could be applied to such products without adversely impacting the cost, development, and operation of such products." Economic Growth and Regulatory Paperwork Reduction Act of 1996, Pub. L. No. 104-208, § 2601(a)(1), 1996 H.R. 3610 (Sept. 30, 1996). This report, to be completed by the end of March 1997, id. at § 2601(b), is also to address "whether alternatives to regulation under the Electronic Fund Transfer Act, such as allowing competitive market forces to shape the development and operation of electronic stored value products, could more efficiently achieve the objectives embodied in that Act." Id. at § 2601(a)(2). The Board is prohibited from finalizing its proposed amendments to Regulation E until the later of June 1997 or three months after the date on which its report is submitted to Congress. Id.
- 7. See Federal Deposit Insurance Corporation General Counsel's Opinion No. 8, 61 Fed. Reg. 40,490 (Aug. 2, 1996) (hereinafter FDIC General Counsel's Opinion No. 8). The FDIC received 20 comment letters addressed to Office of the Executive Secretary, Federal Deposit Insurance Corporation. This Article uses the following form of citation to refer to individual comment letters to the FDIC: FDIC Comment Letter of [commentator] [page number] (date of letter).
- 8. See Office of Comptroller of the Currency, Stored Value Systems: Information for Bankers and Examiners, Bulletin 96-48 (Sept. 10, 1996) [hereinafter OCC Bulletin 96-48].
 - 9. Proposal, supra note 4, at 19,698.
 - 10. OCC Bulletin 96-48, supra note 8.

In practice, the consumer pays a bank or other provider for a card loaded with value. The consumer carries the card with her into various stores and, to make a purchase from a specific merchant, inserts the card into the merchant's POS terminal, perhaps entering her own personal identification number ("PIN") if it is required for validation. "No credit check or signature is needed Funds are deducted directly from the cards and transferred to the vendor's terminal. Merchants can transfer the value of accumulated transactions to their bank accounts by telephone as frequently as they choose." Generally, the value stored on such cards is not expended through transactions made over the Internet, although several financial services are currently enabling remote payments to be made by "electronic cash" stored on the hard drive of the consumer's personal computer or accessible through computer-card interface. 12

12. See, e.g., ABA TASK FORCE ON STORED VALUE CARDS, A Commercial Lawyer's Take on the Electronic Purse: An Analysis of Commercial Law Issues Associated With Stored Value Cards and Electronic Money, 52 BUSINESS LAWYER 653, 660 (1997) [hereinafter Commercial Lawyer] (noting that "[i]n contrast to stored-value cards, which are largely intended to be used for point-of-sale transactions, 'value' stored on personal computers and transmitted over networks can be used for transactions where the buyer is at a location remote from the seller and the actual place of sale."); DEPARTMENT OF TREASURY, OFFICE OF TAX POLICY, SELECTED TAX POLICY IMPLICATIONS OF GLOBAL ELECTRONIC COMMERCE 17-18 (1996) [hereinafter SELECTED TAX POLICY IMPLICATIONS] (observing that generally, "PC-based systems," in which "value is transferred to and held in a personal computer and transferred electronically from one computer to another," "are designed to be used remotely, whereas card-based systems are designed for face-to-face commerce in retail transactions"); FDIC GENERAL COUNSEL'S OPINION NO. 8, supra note 7 at 40,490 (Aug. 2, 1996) (indicating, in the context of discussion of stored-value cards, that "the Legal Division believes that in general the principles discussed herein would apply equally to stored value computer network payment products").

Several different proprietary systems, such as ECash, have been developed specifically for such types of transactions. Indeed, they can "in practical terms [convert] the customer's hard drive [into] a very large stored value card that does not fit in the consumer's pocket but does allow for a global purchasing reach across the Internet." Federal Deposit Insurance Corporation, Public Hearing Concerning Stored Value Cards and Other Payment Systems 77 (Sept. 12, 1996) [hereinafter FDIC Hearing] (remarks of Frank O. Trotter III, Senior Vice President and Director, International Markets Division, Mark Twain Bank). See also Comment Letter of Peter C. Freund, Managing Director of Electronic Commerce, Bankers Trust Company 1-25 (Sept. 5, 1996) (addressing in detail the question of stored value payments over computer networks, and recommending that the Board adopt a de minimis exemption from Regulation E coverage for such payments); Comment Letter of Nessa E. Feddis, Senior Federal Counsel, American Bankers Association 13 (Sept. 5, 1996) (increased complexity, different abilities to provide disclosures, and other "operational and technological differences" present in network payment products call for further review and study before they are treated like stored value cards for purposes of Regulation E); Commercial Lawyer, supra note 12, at 660-662 (reviewing various systems); Tom Steinert-Threlkeld, The Buck Starts Here, WIRED, Aug. 1996, at 134, 194 (discussing DigiCash system, which "turns a user's hard drive into a purse"); SETH GODIN, PRESENTING DIGITAL CASH (1995) (analyzing operations of various proprietary systems of electronic cash). However, a detailed analysis of such systems is beyond the scope

^{11.} John Wenninger & David Laster, *The Electronic Purse*, 1 CURRENT ISSUES IN ECON. AND FIN. 7 (1995) [hereinafter *Electronic Purse*]. See also MASTERCARD INTERNATIONAL, LEARNING ABOUT SMART CARDS, (Consumer Information Brochures, Series No. 5, (1995)) [hereinafter LEARNING ABOUT SMART CARDS] (informing consumers that they can pay for goods "by inserting your card into the [POS] terminal, entering your [PIN] and following the instructions on the screen as you would in a typical [automatic teller machine] transaction. Each time you use your smart card, the purchase amount is deducted from your card...."). For a general discussion of the regulation of POS terminals by Regulation E, see Nancy E. Gould, *The Trend Toward a Cashless Society: The Point of Sale Electronic Fund Transfer*, 10 Ann. Rev. Banking L. 521 (1991).

Stored value cards promise to facilitate transactions whose aggregate amount has been estimated by the Congressional Budget Office as "roughly \$20 billion a year-similar to the market for traveler's checks." They provide to the consumer a convenient and efficient means of payment that does not require her to become affiliated with a financial institution such as a bank or credit card company or to record the transaction in a checkbook.

The benefits to the other participants in stored value transactions are even greater. To merchants, stored value cards offer to reduce the costs of handling cash (an expense currently estimated as 5% to 7% of total cash receipts) and, by reducing the need to make change, to foster a more efficient flow of customers through checkout lines.¹⁶

of this Article.

A device recently brought to market should bridge the gap between computer-based systems and those involving stored value cards. See Otis Port, There's an ATM in Your Home Computer, Bus. Wk., Feb. 17, 1997, at 98 (describing product that "resembles an ordinary 3.5-inch floppy [disk] -- but with a slot for a smart card" to be inserted; when this combination is inserted into a computer's floppy drive, value may be loaded onto or transmitted by the card through the computer's modern.) [hereinafter ATM in Your Home].

13. CONGRESSIONAL BUDGET OFFICE, EMERGING ELECTRONIC METHODS FOR MAKING RETAIL PAYMENTS 9 (June 1996) [hereinafter EMERGING ELECTRONIC METHODS]. "Reaching that market size will take many years, however, and there is no guarantee that the current effort or designs will be the successful ones." *Id.* "[A] smaller market [is] much more likely in the near term." *Id.* at 16. *See also* Back to the Future?, *supra* note 2, at A8 (observing that "in the U.S. it is estimated that 88% of transactions are done by cash or check, and of these 83% are for less than \$10"); JACK WEATHERFORD, THE HISTORY OF MONEY 239 (1997) (noting that "[i]n the mid-1990's cash transactions amounted to more than \$8 trillion annually, and nearly a quarter of those were transactions of less than \$10 in value. In the United States alone, customers execute some 300 billion cash transactions totaling \$455 billion annually. About 225 billion of these transactions — 75 percent of all cash transactions— are for amounts of less than \$20").

14. See, e.g., Hearings, supra note 3. Rosalind L. Fisher, Executive Vice President, Visa U.S.A., stated that:

smart cards would afford users the convenience of parking at the Dunn Loring metro [mass transit train] station without having to dig in the glove compartment for change for the meter-- getting your Metro ticket quickly and easily without having to worry about the dollar bill being crinkled and spit back at you and stopping to buy a copy of the Post and a bagel downstairs on your way to the office -- all with this one card.

Id. According to Ms. Fisher,

Stored value cards will significantly benefit consumers, merchants, and others involved in payment transactions. Consumers will benefit from ease of use, convenience and increased transaction speed compared to cash and checks. The stored value card also will be beneficial to those consumers who don't already have many payment options. A bank account isn't necessary to use a stored value card. This product could provide payment card utility for those consumers who don't have or prefer not to have, a relationship with a financial institution and thus don't have cash readily available through ATMs or the ability to easily cash checks.

Id. "Merchants will benefit from reduced costs as a result of less pilferage, theft and vandalism (particularly in unattended and mass transit environments), and reduced cash handling due to electronic payments. They will also benefit from increased transaction speed." *Id.*

15. Electronic Purse, supra note 11, at 8.

16. See Russell Mitchell, The Smart Money is on Smart Cards, BUS. WK., Aug. 14, 1995, at 68 [hereinafter Smart Money]. See also Carol H. Fancher, Smart Cards, SCI. AM., Aug. 1996, at 40, 43 (Stored value cards can help save the estimated four percent of the value of all transactions lost to counting,

Moreover, these cards would "likely have lower transaction fees than on-line debit cards and, unlike checks, offer assured payment." These financial products would also enable merchants to benefit from both the "float"—that is, the interest that accrues on the prepaid funds until they are disbursed by the consumer. and the "slippage," or the prepaid value on the card that is never used by the consumer. 19

Although stored value cards are common in Europe,²⁰ they are just beginning to become popular in Asia²¹ and the United States.²² Many in this country are familiar

moving, storing, and safeguarding cash, as well as the interest lost by holding cash instead of keeping money on deposit.).

- 17. Electronic Purse, supra note 11, at 8. Debit cards are discussed in more detail at infra note 90.
- 18. See Richard Perez-Pena, Card for Subways and Sundries, N.Y. TIMES, Jan. 22, 1996, at B1 (discussing benefits of stored value cards to merchants). See also Electronic Purse, supra note 11, at 8 (observing that "[t]o the extent that the balance on an electronic purse substitutes for demand deposits, cardholders forego interest on their checking accounts."); Smart Money, supra note 16, at 68 (remarking that "[s]mart-card issuers can keep the 'float' that allows a card issuer to invest customer money while it sits idle on chip cards").
- 19. See Smart Money, supra note 16, at 68 (observing that "in the traveler's check industry, [slippage] amounts to a huge 7%").
- 20. See, e.g., Frederika Randall, Phone Card Frenzy, WALL St. J., Jan. 13, 1997, at A16 (discussing thriving trade in Italy for telephone cards as collectibles); Douglas Lavin, French Smart Card Proves a Bright Idea: Once-Shunned European Innovation is Sizzling, WALL St. J., Apr. 22, 1996, at A18 (noting that smart card programs were introduced by banks in Belgium, Demark, Portugal, and Finland, as well as "by almost all banks and pay phones in France, and are being adopted by banks in Austria and Germany and by the Spanish social security system. But the cards have yet to crack the largest credit-card market in the world, the U.S."); Smart Money, supra note 16, at 68 (observing that "[s]mart cards have taken off all over Europe and Asia: Most of the nearly 33 million of them in circulation by yearend 1995 were issued there "); Thomas A. Bass, The Future of Money, WIRED, Oct. 1996, at 141, 142 (quoting Walter Wriston as saying that

[i]n France, they introduced smart cards by fiat: they just announced one day that you had to use smart cards for all automatic teller machines. Smart cards are very big in Germany, and in 1995, 400 million smart cards were shipped to Asia. You can't make a phone call in Japan without one.).

Id.

- 21. See ATM in Your Home, supra note 12 (noting that smart card computer interface device is being introduced in Europe and Asia, where its manufacturer expects to sell "several hundred thousand units this year"); Products to Watch in 1997, Bus. Wk., Jan. 13, 1997, at 85 (indicating that 35,000 residents of Hong Kong recently participated in a test marketing of Mondex stored value cards).
- 22. See generally MARTIN MAYER, THE BANKERS: THE NEXT GENERATION 156 (1997) (experimental issuance of stored value Visa cards at 1996 Olympics in Atlanta "flopped pretty badly," with most stored value cards ending up unused as collectibles); Hearings, supra note 3 (testimony of Eugene A. Ludwig, Comptroller of the Currency, remarking that "[s]mart card technologies gained significant footholds in France in the 1980s, but are only now being considered as a serious payment alternative in the U.S."); Valerie Block, Smart Cards Off to a Bumpy Start, Critics Say, AM. BANKER, Jan. 17, 1996, at 14 (citing an "increasingly vocal band of skeptics" of leading smart card programs worldwide); Nikhil Deogun, The Smart Money Is On "Smart Cards," But Electronic Cash Seems Dumb to Some, WALL St. J., Aug. 5, 1996, at B1 (remarking that "despite an Olympic-size promotion, [smart] cards appear to have failed so far to score with Atlanta consumers" who were given them by Visa and three Southern banks in conjunction with the Summer 1996 Olympics); Saul Hansell, It's Coming: Your Pocket Cash on a Plastic Card, N.Y. TIMES, Apr. 10, 1996, at D1 (discussing joint project of Citibank, Chase Manhattan, Mastercard and Visa to launch a test of smart cards on the Upper West Side of Manhattan); Garry Pierre-Pierre, Looking for Ways to Make the Metrocard a Riding Habit, N.Y. TIMES, July 30, 1996, at D1

with stored value cards for use in photocopying machines; as successive copies are made, the machine deducts the costs from the value stored on the card.²³ In addition, San Francisco, New York, and Washington, DC have adopted stored value cards using magnetic stripes for use in their mass transit systems.²⁴

(noting that two years after Metrocard stored value farecard system was put into place in New York City subway system, only eight percent of riders are using cards); David Stout, *Plan to Expand Metrocard's Uses Is Put Off*, N.Y. Times, May 11, 1996, at A22 (observing that New York's Metropolitan Transportation Authority and Chase Manhattan Bank could not reach an agreement on a system to allow commuters to make small purchases with their Metrocard stored value transit fare-cards). *See* DONALD I. BAKER & ROLAND E. BRANDEL, THE LAW OF ELECTRONIC FUND TRANSFER SYSTEMS ch. 9-1 through 9-18 (2d ed. 1988) for an early history of the development and application of the smart card in the United States and Europe [hereinafter LAW OF ELECTRONIC FUND TRANSFER].

23. In Europe, "phone cards" that work similarly are popular for making telephone calls: the value stored on the card is decreased as the call progresses. By contrast, many prepaid phone cards in use in the United States "don't even have magnetic stripes, let alone memory chips. They do not contain stored value ... Instead, they merely provide you with a personal identification number (PIN) that allows you to do a certain amount of calling through a special system." Albert B. Crenshaw, Getting Carded: An Owner's Guide, WASH. POST, Mar. 15, 1996, at F3. See also Comment Letter of Marcia E. Heister, General Counsel, Electronic Payment Services, Inc. 4, n.1 (Sept. 5, 1996) (explaining that "[t]he value stored on the [American phone] cards is accessed by telephoning an 800 number and providing the card number, sometimes with a PIN. Although the record of the balance of the card is maintained on a separate database and on-line authorization of transactions is required to access the account, [it is] unclear to what extent, if any, such cards would be subject to Regulation E" because the telephone used to access this account is not an "electronic terminal" within the meaning of that Regulation); Ken Lutz, Telecommunications and Information Services, SMART CARDS, 128, 133 (1996) ("Unlike smart cards, prepaid '800' cards contain no technology. Instead, they access a remote database which tracks the remaining value of the account ... a customer must enter [a large number of digits,] first to call the data base, second to enter the account number unique to each card, and finally, to enter the telephone number of the called party.").

This type of prepaid phone card has been the subject of complaints by consumers who, after paying for such cards, found them deactivated before the allotted value of calls had been made. Gautam Niak, Sorry, Your Prepaid Phone Card Has Been Deactivated, WALL ST. J., July 16, 1996, at B1. Mr. Niak's article is cited in American Bankers Association, The Role of Banks in the Payments Systems of the Future: A Report and Recommendations of the Payments System Task Force 18 (1996) [hereinafter The Role of Banks] to support the proposition that "[i]ssuance of third-party instruments should be limited to regulated depository institutions." Indeed, the Democratic Staff of the Committee on Banking and Financial Services has suggested that in light of "instances of scams involving prepaid phone-cards," issuers of such cards, like banks and thrifts, have minimum capital requirements." Connecting Consumers: Consumer Issues and Emerging Financial Technology, Democratic Staff of Comm. On Banking and Financial Servs., 104th Cong., 1st Sess., at 8 (1996) [hereinafter Connecting Consumers].

Domestic fraud has also apparently involved prepaid phone cards that carry magnetic stripes. Federal law enforcement authorities recently alleged that organized crime elements had "set up a calling-card company that stole more than \$50 million from callers and phone companies from fraudulent sales in the New York area and in other big cities." Selwyn Raab, Officials Say Mob is Shifting Crimes to New Industries, N.Y. TIMES, Feb. 10, 1997, at A1, B4. The alleged scheme involved cards apparently bearing "magnetic strips with a fixed amount of credit for calling time, typically \$20" and sold to customers for that amount. The cards actually "became worthless after \$2 or \$3 in calls because they had not been programmed for the listed amounts." Id.

24. See MAYER, supra note 22, at 151 ("the stored-value card was pioneered in the United States by the Bay Area Rapid Transit (BART) System in San Francisco as a way to achieve a pay-by-distance fare on a subway"); Comment Letter of Michael Vaccari, General Counsel, Metropolitan Transportation

A. Smart Cards vs. Magnetic Stripe Cards

Stored value cards are available in two main types. Those that contain computer chips as opposed to magnetic stripes are known as "smart cards," because the microchip has the capacity to store significantly more information than does a magnetic stripe as well as to perform calculations with this data. A smart card can thus "execute complex tasks in conjunction with a terminal. For example, a smart card can engage in a sequence of questions and answers that verifies the validity of information stored on the card and the identity of the card-reading terminal."

Authority (MTA) 1 (July 9, 1996):

In 1994, MTA began operation of an automated fare collection system that is based on a plastic card with a magnetic stripe. The MetroCard is either swiped through a reader at subway stations or dipped into a farebox on buses where the fare, in the form of electronic cash, is decremented. All 3,600 buses are now operational. The full complement of 467 subway stations will be operational by mid-1997. By 1999, we anticipate in excess of 1.2 billion electronic fare collection transactions a year on MTA's subway and bus properties. We also expect to process close to 200 million fare sales transactions a year.

Id.

- 25. See, e.g., MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 1108 (10th ed.1995) (defining "smart card" as "a small plastic card that has a built-in microprocessor to store and process data and records").
- 26. See Fancher, supra note 16, at 41 (observing that smart cards can "carry 10 or even 100 times as much information as cards with magnetic stripes" and can more practically be used than magnetic stripe cards to carry several different types of stored value accounts, such as transit pass and general cash accounts, on same card). Cf. LEARNING ABOUT SMART CARDS, supra note 11 (explaining that proprietary smart card contains "a microchip that can store the equivalent of 1,500 words about 200 times more than today's cards with magnetic stripes."); James Gleick, Cash is Dying, N. Y. TIMES MAG., June 16, 1996, at 27, 29 (noting that smart card distributed by Visa at 1996 Olympic Games can store "about 80 times as much information as the typical magnetic stripe on a credit card or fare card, and the processor [in the microchip] makes possible the use of cryptographic methods to secure the data") [hereinafter Cash is Dying].

See Robert McIvor, Smart Cards, Sci. Am., Nov. 1985, at 152 for an early discussion of the smart card's capabilities, with particular focus on the embedded technology and its design, and Catherine A. Allen & Jeffrey Kutler, Overview of Smart Cards and the Industry [hereinafter Overview], in SMART CARDS: SEIZING STRATEGIC BUSINESS OPPORTUNITIES 4-8 (Catherine A. Allen & William J. Barr eds. 1997) [hereinafter SMART CARDS] for a brief history of the technological development of smart cards.

- 27. In this connection, smart cards can be further divided into the more familiar "contact cards," which "have gold plated metallic contacts on the suface of the card which physically touch corresponding contacts in the terminal equipment itself," and "contactless cards," which "interact with the terminal via electromagnetic coupling" when held near the terminal. Smart Card Forum Technology Committee, A Smart Card Primer, SMART CARDS, supra note 26, at 236, 238. See also Comment Letter of Ezra C. Levine, Counsel, Cubic Automatic Revenue Collection Group 2 (Sept. 5, 1996) (discussing development of a transportation smart card that "uses a low range radio frequency to communicate to an antenna located on the fare gate [through which] the system deducts the correct fare from the value stored on the card"); Amtech Corp. v. AT/Comm Inc., No. CIV.A.3:92-CV2053D, 1994 WL 529506, *2 (N.D. Tex. Sept. 28, 1994) (involving patent dispute concerning an "on-vehicle processor" that includes means for calculating [and deducting from its stored value] a toll amount due for the vehicle at an upcoming toll facility.).
- 28. Fancher, *supra* note 16, at 41. A type of card intermediate between smart cards and magnetic stripe cards is the "memory card." The integrated circuit in true, or "intelligent," smart cards contains a central processing unit, or microprocessor, that makes decisions, as well as "offer[s] a read/write capability

For this reason and because a chip can segregate different forms of information and value.²⁹ smart cards are generally seen as more secure than magnetic stripe cards.³⁰

[so that] new information can be added and processed. Monetary information, for example, can be added or debited as required." Overview, supra note 26, at 4.

Lacking such a feature, the integrated circuit in "memory cards" such as current telephone cards in Europe and Asia can store information but not perform calculations. Thus, such cards are "primarily information storage cards that contain stored value which the user can 'spend' in transactions." *Id. See also* EMERGING ELECTRONIC METHODS, *supra* note 13, at 10 (contrasting the type of smart card whose chip includes only a memory function with the type that "functions like a small personal computer within a thin plastic card except that it lacks a keyboard, screen, and disk drive."); *A Smart Card Primer*, SMART CARDS, *supra* note 27, at 237 (distinguishing "memory card," which can only store data, from "smart card," which can perform calculations, process data, execute encryption algorithms, and manage data files).

A memory card can store ten times more data than a magnetic stripe card but, unlike that type of card, requires power to operate. *Id.* Because its integrated circuit allows it to "reuse its memory by rewriting data over existing data," security problems may arise. *Id.* For example, an extremely technical discussion of memory cards and their security features, as well as approaches to decoding and rewriting the information that they contain, recently appeared in a United States magazine that officially reports a circulation of over 36,000 copies. *See* "Billsf," *Chipcards Explained*, 2600: The HACKER Q., Winter 1996-97, at 10 (reprinting from a Dutch publication for hackers "some hints to test [a memory phonecard] and find out its secrets.").

29. See LEARNING ABOUT SMART CARDS, supra note 11, advising consumers that in order [t]o prevent unwarranted intrusion, data on the smart card chip is divided into sections, making it private and secure. One section might include the cash you loaded onto the card, another might hold electronic coupons for the supermarket, and another might hold bonus points that you have earned from shopping at your favorite department store. The point is, when data from one section is accessed, the others remain protected.

Id. In addition, the computer memory on the smart card's chip can be used to store such identifying features as the user's retinal scan or other biometric data, which could be compared against those of the person presenting the card at the time of a transaction. See Matt Barthel, Banks Eyeball Sci-Fi Style Identification for ATMs, AM. BANKER, Sept. 22, 1995, at 14. It can also be used to store "other information, such as frequent flier or loyalty program points, discount coupons, or insurance information." The Future of Money: Hearings before the Subcommittee on Domestic and International Policy of the House Comm. on Banking and Financial Services, 103rd Cong. 95 (1995) (hereinafter House Hearings) (statement of Heidi Goff, Senior Vice President, Mastercard International Inc.) See also Paul Burnham Finney, Business Travel: I.B.M. and American Express Are Teaming Up to Promote 'Smart' Cards for Airline Bookings, N.Y. TIMES, Oct. 16, 1996, at D6 (remarking that memory functions of smart cards can be used to enhance "ticketless" travel system and customer reward programs).

30. See, e.g., "A World That Turns on Plastic," FIN. TIMES, Aug. 23, 1996, at 9 (finding that "[a] chip-based card is much more difficult to counterfeit than the magnetic stripe card"); Overview, supra note 26, at 6 (observing that "chips don't wear out as easily as magnetic based cards through contact or friction, are not susceptible to damage when they pass through magnetic fields, and are far more difficult to compromise or counterfeit.... [C]hip cards [are] more tamper-resistant and difficult to replicate than mag stripe [cards]."); BANK FOR INTERNATIONAL SETTLEMENTS, SECURITY OF ELECTRONIC MONEY: REPORT BY THE COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS AND THE GROUP OF COMPUTER EXPERTS OF THE CENTRAL BANKS OF THE GROUP OF TEN COUNTRIES 52 (1996) ("Tampering with a chip would entail overcoming many physical and cryptographic barriers," yet "current security measures may become obsolete and new ones may have to be adopted."); id. at 49-52 (detailing various design and production features developed to maximize security of smart cards).

See also MAYER, supra note 22, at 153 (magnetic stripe "is World War II technology," according to one expert, and is "inherently insecure."); John C. Dvorak, Not-So-Smart Money, P.C. COMPUTING, Jan. 1997, stated that:

[b]y nature the ["anonymous and disposable"] smart card is a read-write medium, unlike the

However, smart cards themselves are by no means invulnerable to physical and electronic attack.³¹

B. Reloadable vs. Disposable Stored Value Cards

"Reloadable" stored value cards are those whose value, if depleted, can be replenished by the consumer through the use of a special terminal that accepts cash and transfers its value to the card, or possibly by means of an automatic teller machine that transfers value from the consumer's account to the card itself. "Disposable" cards, on the other hand, are designed to be discarded when the value originally stored on them is exhausted.³² This distinction applies to both smart cards and magnetic stripe cards.

typical mag stripe on credit cards. The mag stripe usually contains only the credit-card number and some extra bits. And it's read-only. Hackers with mag-stripe writers love to toy with these cards. I was at a Defcon Hackers conference one year, and the game du jour was to duplicate and crack the hotel door locks, which employed mag stripe-type keys. So what do you suppose happens when everyone with a PC suddenly has this new [input/output] device that writes to smart cards? College kids and hackers will go after this card like there's no tomorrow.

Id. at 57. Cf. Cash is Dying, supra note 26, at 50 (observing that "[n]o sooner had New York's subway system virtualized its fare tokens in the form of magnetic-stripe cards than a few ingenious citizens discovered that they could throw together some cheap circuitry and heads from an old tape recorder and produce their own Metrocards").

31. See, e.g., Valerie Block, Smart Card Experts Question Report on Breachability, Am. BANKER, Oct. 2, 1996, at 12 (remarking that industry executives fault the alleged discovery by Bell Communications Research ("Bellcore") of smart card encryption flaw as untested, not applicable to some systems, and, in any event, not cost-effective for pountial criminal, but admit that stored value cards are "tamper resistant" rather than completely "tamper proof"); Steve Glain & Norihiko Shirouzu, Lost Gamble: How Japanese Attempt to Slow Nuclear Work in North Korea Failed, WALL St. J., July 24, 1996 at A1-10 (reporting that at least \$588 million was lost by purveyors of stored value cards for "cashless" pachinko game machines in Japan after criminals discovered how to crack encryption codes and produce fraudulent cards); John Markoff, 2 Israelis Outline New Risk to Electronic Data Security, N.Y. TIMES, Oct. 19, 1996 at A38 (explaining how Israeli computer scientists claim discovery of a more practical method of breaching smart card encryption techniques than that previously announced by BellCore); John Markoff, Potential Flaw in Cash Card Security Seen, N.Y. TIMES, Sept. 26, 1996, at D1-2 (reporting that, according to analysts at Bellcore, "[i]n theory . . . a smart card's security could be breached by forcing the microchip in the card to make a calculation error . . . through sophisticated means like bombarding the card with radiation or perhaps cruder methods like placing it in a microwave oven" and thus divining the secret data that authenticates the card when it is inserted into a merchant's card reader.).

32. See, e.g., FDIC General Counsel's Opinion No. 8, supra note 7 at 40,490 (noting that "[a] deposit account holder may load value onto the card by withdrawing from an account through a teller, via an ATM, or, potentially, via a specially equipped telephone or personal computer."); LEARNING ABOUT SMART CARDS, supra note 11 (remarking that a consumer can electronically "load" cash onto the card by inserting the card into an ATM or point-of-sale terminal).

Reloadable cards themselves can be divided into "[s]tand-alone reloadable cards[, which] can be reloaded with additional value multiple times," and "[f]eature reloadable cards[, which] are multi-application cards that have a stored value feature [but] may also have debit or credit features and serve as an automated teller machine access device." FDIC Comment Letter of John H. Huffstutler, Senior Vice President and Chief Regulatory Counsel, Bank of America 2 (Oct. 30, 1996). The former "usually do not contain customer identifying information and are anonymous"; the latter "are likely to have customer identifying information contained on the card." *Id*.

Visa's World Wide Web site for consumers, (visited Dec. 21, 1996) http://www.visa.com,

C. Closed vs. Open Stored Value Systems

In "closed" systems, the value on the smart card or magnetic stripe card can be used only for goods or services provided by the card issuer (such as fares on a particular mass-transit system, or food, photocopying, books, and vending machine items within a particular university's system).³³

In "open" systems, the issuer is not necessarily the provider of the goods and services but could be one of several issuers whose stored value cards are mutually acceptable. For example, three separate banks issued VISA Cash cards during the 1996 Olympics, and approximately 1,500 merchants were equipped to receive payments made with such cards.³⁴ The promise of open systems, in which one card can be used for transactions with a wide variety of different merchants, has led to the characterization of stored value cards as "electronic purses" or "electronic wallets."³⁵

The line between closed and open systems is a fuzzy one. Clear distinctions can certainly be drawn among "truly closed environment systems such as subway cards and store gift certificates," in which the stored value is redeemed only for products or services of the issuer, and closed systems involving several issuers (for example, "university cards acceptable at retail shops outside the campus boundary and 'gift certificates' or cards usable at all stores in a single mall, . . . [as well as c]ards accepted

observes the reloadable/disposable distinction in discussing its "VISA Cash" smart cards, in each of which "[a] microchip embedded in each plastic card stores monetary value":

VISA cash cards are being offered [in] a variety of looks. However, there are two main types of VISA Cash cards: Disposable and Reloadable.

Disposable cards are loaded with a pre-determined value. These cards typically come in denominations of local currency, such as US \$10. When the value of the card is used, the card is discarded and a new card may be purchased. These cards may be dispensed from machines called Card Dispensing Machines (CDMs), which accept a variety of payment methods.

Reloadable cards come without a predefined value. Cash value is reloaded only the card at specialized terminals and Automated Teller Machines (ATMs). When the value is used up, you can load the card again.

Id.

- 33. See, e.g., Commercial Lawyer, supra note 12, at 657-58; THE HISTORY OF MONEY, supra note 13, at 240 ("By 1995 about 1.8 billion prepaid cards were in use in the world, representing some 14 billion money transactions. Most of these cards were in closed systems such as college campuses, amusement parks, cruise ships, vacation resorts, or gambling casinos.").
- 34. Commercial Lawyer, supra note 12, at 660. See also Statement of Rosalind Fisher, supra note 14 (same stored value card used in transactions for parking, transit, newspaper, and coffee).
- 35. See, e.g., Overview, supra note 26, at 23 (remarking that "[t]he term 'electronic purse' is generally applied to multi-use of programs in which the stored value card is accepted at a variety of merchants or businesses, such as for pay phone calls, transit fares, vending machine items, restaurants, fast food stores, and sundry purchases (generally of small value) at local stores."); RAVIKALAKOTA & ANDREW B. WHINSTON, FRONTIERS OF ELECTRONIC COMMERCE 314 (1996) (defining "electronic purses" as "wallet-sized smart cards embedded with programmable microchips that store sums of money for people to use instead of cash for everything from buying food, to making photocopies, to paying subway fares"); The Electronic Purse, supra note 11, at 7 (noting that "[w]hen used in an open system, a prepaid card is commmonly known as either an electronic purse or a stored value card."); WILLIAM H. GATES, THE ROAD AHEAD 81-82 (1996) (predicting that "wallet PC" containing smart card, possibly protected by personal identification number or biometric authentication mechanism, will lessen need for cash).

at various private companies doing business within the university e.g., bookstores [and] restaurants.")³⁶ Yet there are those who question whether there can be a viable middle category between "truly closed" and open systems: "If . . . the university card can be used off-campus, is it an open system?"³⁷

In theory, smart cards and magnetic stripe cards could each be used for either closed or open systems. Yet in practice, magnetic stripe cards, perhaps because of their limited memory capacity, are usually associated only with closed systems.³⁸

II. INTERVENING IN FINANCIAL AND TECHNOLOGICAL EVOLUTION

As the legal issues raised by stored value cards have grown more complex and generated discussion among a wider variety of regulatory authorities and commentators, a spectrum of opinions has emerged on the most appropriate timing of regulation in this area. Arguments in support of delaying regulatory efforts cite not only the speed of technological change and the relative inexperience of American consumers with stored value card technology, but also the ability of consumers to contract effectively with card issuers. However, although the first two of these points are undeniable, the third remains speculative.

Several leading regulators and the joint statements of interagency working groups have endorsed policies of minimal governmental intervention. For example, in October 1995, Federal Reserve Board Vice Chairman Alan Blinder asserted that "at this point, the uncertainties regarding the future of 'electronic money' are so overwhelming that we mainly suggest patience and study rather than regulatory restrictions." In separate speeches, both Chairman Blinder⁴⁰ and Federal Reserve Board Governor Edward W.

- 36. Comment Letter from Nessa E. Feddis, supra note 12, at 9.
- 37. Commercial Lawyer, supra note 12, at 658 n.4.
- 38. Electronic Purse, supra note 11, at 8.
- 39. See Hearings, supra note 3 (testimony of Alan S. Blinder, Vice Chairman of the Federal Reserve Board of Governors, on Oct. 11, 1995). See also Gene Koprowski, Rep. Mike Castle on E-Money: Let the Market Decide, FORBES ASAP, Aug. 26, 1996, at 72 (quoting chairman of Subcommittee on Domestic and International Monetary Policy: "I look at the government's role [with regard to electronic money] as not being one that is going to define what will happen in the future."); FDIC Comment Letter of Jill M. Considine, President, New York Clearing House, 9 (Oct. 31, 1996)

We think this would be a very poor time to seek legislation affecting the treatment of stored value systems, whether with respect to the deposit status of related obligations or otherwise. Absent evidence of a need for early action to protect consumers or banks, we urge Congress and the relevant regulatory agencies to monitor the development of these systems but to avoid unnecessarily premature regulation.

Id.

40. U.S. Treasury Conference on Electronic Money & Banking: The Role of Government, Sept. 19, 1996. Chairman Alan Greenspan stated:

[t]o develop new forms of payment, the private sector will need the flexibility to experiment, without broad interference by the government. The history of the Automated Clearing House provides a useful caution. The Federal Reserve, in partnership with the banking industry, has taken a leading role in developing the ACH system for more than twenty years. It was the advent of the ACH that led many economists to discuss money in a "cashless society." Although the ACH has allowed the automation of some important types of payments, it has never been widely used by consumers [W]e significantly

Kelley, Jr. 41 suggested that the Board would not itself attempt to introduce a new form of electronic payment product or to play a major role in influencing the development of the stored value card industry.

Similarly, Comptroller of the Currency Eugene Ludwig enunciated "four guiding principles to direct the appropriate government response to emerging technology": (1) "government should only intervene when there is a clear need to advance the public interest"; (2) government "must be careful to work with market forces [by] articulat[ing] the goal and, as much as possible, permit[ting] the private sector to develop the means to pursue that goal"; (3) government "should be extremely wary of imposing requirements solely for its administrative convenience"; and (4) government "must maintain a modern regulatory infrastructure" by "moderniz[ing] or eliminat[ing obsolete rules]."

These principles were echoed by the draft report recently released by a federal interagency task force⁴³ charged with developing guidelines for global electronic

underestimated the convenience of paper for consumers and especially the cost and difficulty of building a broad-based infrastructure to support new electronic-based payment systems. It is also possible that efforts by the government to choose and support a single technology—the ACH in this case — may have slowed efforts by the private sector to develop alternative technologies. In the current period of change and market uncertainty, there may be a natural temptation for us — and a natural desire by some market participants — to have the government step in and resolve this uncertainty, either through standards, regulation, or other government policies. In the case of electronic money and banking, the lesson from the ACH is that consumers and merchants, not governments, will ultimately determine what new products are successful in the marketplace. Government action can retard progress, but almost certainly cannot ensure it [I]ndustry participants may find that self-policing is in their best interest."

Id.

41. CyberPayments '96 Conference, June 18, 1996. Board of Reserve Governor Edward W. Kelley, Jr. stated:

I do not anticipate that the Federal Reserve will seek to provide a new retail electronic payment product in this emerging industry. In the 1970s, the Federal Reserve took a central role in developing the ACH system on behalf of the banking industry, and then explicitly subsidized operation of the ACH for some time. Now, twenty years later, circumstances are sufficiently different that we do not believe that a similar approach would be necessary or desirable to advance the efficiency and effectiveness of the payment system. There is no lack of private sector investment in providing new products and new means of delivering services to consumers. Experimentation is needed to determine which products best fit consumers' needs, but history has shown that the private sector, rather than government, is best able to perform this role.

- Id. Both speeches are available at the Federal Reserve's World Wide Web site, (visited Dec. 21, 1996) http://www.bog.frb.fed.us./boarddocs/speeches/19960618.htm>.
 - 42. Hearings, supra note 3, at 5-6 (testimony of Eugene A. Ludwig).
- 43. Information Infrastructure Task Force, A Framework for Global Electronic Commerce 9 (Dec. 11, 1996 draft), available at http://www.iitf.nist.gov/eleccomm/glocomm.htm#financial.

The interagency working group consists of high-level representatives of several cabinet agencies, including the Departments of Treasury, State, Justice and Commerce, as well as the Executive Office of the President, including the Council of Economic Advisors, the National Economic Council, the National Security Council, the Office of Management and Budget, the Office of Science and Technology Policy, the Office of the Vice-President, and the U.S. Trade Representative. Independent commissions including the Federal

commerce. The group concluded that "the private sector must continue to lead" in the development of such commerce and that governmental regulation in this area should be minimized lest it "limit unnecessarily the availability of, and raise the prices of, products and services to consumers the world over, and distort the development of the electronic marketplace." Where necessary to facilitate such commerce, "governments should establish a predictable and simple legal environment based on a decentralized, contractual model of law rather than one based on top-down regulation."

Presumably, such a decentralized and contractual model would arise from, and lead to, bargaining among the parties rather than a uniform code. 46 In this context, the American Bar Association's Task Force on Stored Value Cards "recognized that for most of these new stored-value products [the] legal rules will be the terms and conditions established by the products' promoters." The group thus attempted in its report "to provide some 'backstop' guidance with respect to an issue that is not otherwise covered by enforceable system rules or private contracts," even as the underlying technology was being developed. The American Bankers Association's own Payment Systems Task Force joined the call for "voluntary industry rules of conduct [rather than] intrusive government regulation. In addition to imposing high costs of compliance, government regulations frequently have unanticipated and undesirable consequences for financial markets, and often stand in the way of useful innovation."

A similar position was taken by one of the financial institutions responding to the Federal Reserve Board of Governors' proposed amendments to Regulation E. Because of the wide variety of stored value systems that could be created,

the participants must establish the legal framework governing their particular system. With respect to the contractual arrangements between the issuers and the consumers, those contracts would appear to be most often embodied in disclosure

Communications Commission and the Federal Trade Commission also have been involved. Id. at Executive Summary n.1.

- 44. Id. at 2.
- 45. Id. at 3.
- 46. Cf. Statement of Jeffrey B. Ritter that "the need for a uniform commercial law construct is apparent. Whether that framework evolves as a matter of law-making, or through effective industry self-regulation, is not as important as . . . the formulation of the business practices and legal norms that are essential to earning consumer confidence." Hearings, supra note 3, 104th Cong. 95-96 (1996) (statement of Jeffrey B. Ritter, Chairman of the American Bar Association's Committee on the Law of Commerce in Cyberspace).
- 47. Commercial Lawyer, supra note 12, at 655. See William J. Barr, Shifting Boundaries, in SMART CARDS, supra note 26, at 76, for an example of the types of information that a leading industry group recommends be included by smart card issuers in their contracts with consumers on the issue of privacy.
- 48. Commercial Lawyer, supra note 12, at 656. Indeed, in observing that its "legal analysis was often driven by the technological capabilities of the new products," the Task Force emphasized that "some of the products described are in a formative stage, and may very well change subsequent to [and possibly because of] this Report." Id.
- 49. The Role of Banks, *supra* note 23, at iv. *See also* Comment Letter of Judith Rinearson, Group Counsel, American Express Travel Related Services 4-5 (Sept. 5, 1996) (observing that because "the electronic stored value industry is in its infancy," delay in promulgating regulation would allow for "more appropriate [and informed] legislation with better coordination among the other state and federal regulators with a stake in these issues.") *Id.* at 5.

documents, whether embedded on the card itself or on a receipt of disclosure delivered in connection with the card upon issuance.⁵⁰

Yet the free-market view was not unanimously adopted. For instance, the Congressional Budget Office suggested that "[u]nderstandably, government agencies do not want to impose regulation prematurely for fear of stifling a fledgling industry. However, if the government resolved some legal ambiguities, even provisionally, that might further the acceptance of the payment methods by consumers and merchants." Further, a report prepared by the Democratic staff of the House of Representatives' Committee on Banking and Financial Services began by recommending that:

[t]he appropriate time to deal with these issues is now, before major transformations occur and more sophisticated products are introduced into the marketplace. The challenge to public policy makers and industry is to address consumer concerns in the development of the technology and design or the delivery systems while minimizing impediments to technological advancement.⁵²

One commentator on technology issues added that:

[t]here is a case to be made: that money is not just another product, best left to the vagaries of the market, but an irreplaceable underpinning of society; that confidence in money requires one currency, not a multitude, that only the Government, after public debate among contending interests, can set standards equitably, rather than leaving the critical choices to, say, the credit-card companies.⁵³

50. Comment Letter of L. Wayne Sams, Senior Vice President and Assistant General Counsel, First Union Corporation Legal Division 9 (Aug. 29,1996).

[A]llowing the participants in the various card systems to govern themselves by contract also permits adaptation of the systems to changing conditions. We are still early in the development of stored value and smart cards. We believe that it would be unfortunate for regulation to begin to define the products, determine their features and resolve the legal implications associated with the systems before any of us fully understands which of these various systems, or even new systems not developed, will be successful from an economic and business standpoint.

Id. at 10.

- 51. EMERGING ELECTRONIC METHODS, supra note 13, at xvi.
- 52. CONNECTING CONSUMERS, *supra* note 23, at 1. Indeed, one industry source recently predicted that by the year 2000 "over 25 percent of United States households will be using a smart card to make payments, to access information from computers or television sets, or to store healthcare information." SMART CARDS, *supra* note 26, at vii.
 - 53. Cash is Dying, supra note 26, at 50.

[T]he ultimate shape of electronic money will depend enormously on who wins the early market-share battles. Money, as a product, will offer a perfect example of the Law of Increasing Returns. The more people who use any given type of money, the closer it comes to universal acceptance, and the more useful and attractive it will become. Just like fax machines and Microsoft Windows, any particular form of electronic money will take off when, and only when, it achieves a certain level of penetration in the marketplace, a critical mass. By then it will have required a huge investment in the infrastructure of card readers and other associated technologies; that will raise the barrier for potential new competitors.

Id. "So the choices made now by private companies, with little attention to public-policy issues, deserve more scrutiny than they are receiving." Id.

Ironically, these conflicts had been confronted and resolved two decades earlier in a slightly different context during the enactment of the Electronic Fund Transfer Act⁵⁴ and the promulgation of Regulation E, whose references to "accounts" maintained by financial institutions for consumers are crucial to the current regulatory debates.

III. THE ELECTRONIC FUND TRANSFER ACT AND REGULATION E

A. History

1. EFTA

In 1978, Congress enacted the Electronic Fund Transfer Act to "provide a basic framework establishing the rights, liabilities, and responsibilities of participants in electronic fund transfer systems." The Act's "primary objective [was] the provision of individual consumer rights" and, as one court observed, to "help bring certainty to an era of banking which was fast becoming faceless, an era wherein banking could be conducted almost exclusively through machines." According to the legislative history of the Act, issues of consumer protection were "particularly acute because existing state laws covering checks and federal consumer protection laws governing credit cards were not drafted with EFT [Electronic Fund Transfers] in mind, leaving the rights of consumers . . . undefined in the law." 57

An "electronic fund transfer" under the EFTA includes "any transfer of funds, other than a transaction originated by check, draft, or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument, or computer or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit an account." A similar definition appears in Regulation E. 59

^{54. 15} U.S.C. § 1693 (1978).

^{55. 15} U.S.C. § 1693(b) (1978). See also Shawmut Worcester County Bank v. First Am. Bank & Trust, 731 F. Supp. 57, 61 (D. Mass. 1990) (finding EFTA, which "was primarily created for the especial benefit of consumers" and "evidently... aimed at providing a framework of law regulating the rights of consumers as against financial institutions in electronic funds transfers," inapplicable to "a garden-variety wire transfer between financial institutions."). Id. at 62.

^{56.} Spain v. Union Trust, 674 F. Supp. 1496, 1500 (D. Conn. 1987) (observing that the statute was intended to cover transactions making use of distinct types of technological developments: automatic teller machines, pay-by-phone systems, direct deposit and automatic payment methods, and point-of-sale transfers).

^{57.} S. Rep. No. 95-215 (1978).

^{58. 15} U.S.C. § 1693(a)(6) (1994). The EFTA defines a "financial institution" as "a State or National bank, a State or Federal savings and loan association, a mutual savings bank, a State or Federal credit union, or any other person who, directly or indirectly, holds an account belonging to a consumer." *Id.* at § 1693(a)(8).

^{59.} Regulation E defines an "electronic fund transfer" as "any transfer of funds that is initiated through an electronic terminal, telephone, computer, or magnetic tape for purpose of ordering, instructing, or authorizing a financial institution to debit or credit an account." 12 C.F.R. § 205.3(b). Unlike the EFTA, the Regulation specifically incorporates the elements of access devices and electronic fund transfer into its definition of "financial institution": "a bank, savings association, credit union, or any other person

Courts have generally defined "electronic transfer" strictly, finding, for example, that "Congress intended to exclude from the Act's coverage any transfer of funds initiated by a phone conversation between any natural person and an officer or employee of a financial institution, which was not made pursuant to a prearranged plan and under which periodic and recurring transfers were not contemplated." To be an "electronic transfer," the transfer must be:

initiated through an electronic device as defined by the Act. [When] the plaintiff initiated her wire transfer through contact with the bank's personnel, [t]he face-to-face nature of [the] personal banking transaction remove[d] it from the scope of the Act's coverage. The fact that the bank used an electronic device to process the transfer internally does not change the result.⁶¹

Similarly, in Spain v. Union Trust,⁶² the customer's action under the EFTA against the bank for allegedly improperly debiting her account without her knowledge or authorization was dismissed because "[t]he presence of human contact takes this transaction out of the scope of the Act." The court distinguished an "electronic fund transfer" under the EFTA, which "requires no personal contact, no personal decision-making" and involves an "electronic terminal which takes the place of a face-to-face personal banking transaction," from transactions that, as in the case before it, "require a personal determination as to the propriety of the action to be taken and a personal

that directly or indirectly holds an account belonging to a consumer, or that issues an access device and agrees with a consumer to provide electronic fund transfer services." Id. at § 205.2(i) (emphasis added).

An "electronic fund transfer" thus includes but is not limited to: point-of-sale transfers; automated teller machine transfers; direct deposits or withdrawals of funds; transfers initiated by telephone; and transfers resulting from debit card transactions, whether or not initiated through an electronic terminal. *Id.*

However, among the categories of funds transfers not subject to Regulation E are: transfers of funds originated by check, draft, or similar paper instrument; check guarantees or authorizations; transfers of funds between financial institutions or businesses; securities and commodities transfers; automatic transfers by an account-holding institution subject to its agreement with the consumer account-holder; and preauthorized transfers to or from the account held by a financial institution that itself had assets of \$100 million or less at the close of the previous calendar year. *Id.* at § 205.3(c)(1)-(7) (1996).

Also exempt are "telephone-initiated transfers," defined as "[a]ny transfer of funds that: (i) is initiated by a telephone communication between a consumer and a financial institution making the transfer; and (ii) does not take place under a telephone bill-payment or other written plan in which periodic or recurring transfers are contemplated." *Id.* at § 205.3(e). (This section presumably does not exempt communications by modern that are necessary to effect transactions with an on-line stored value card, *see infra*, note 103, because this mechanism of payment does not directly involve the consumer but only her "access device." Arguably, the consumer's communication is to the financial institution only for authorization and possibly record-keeping and not to direct the "transfer" of the funds, which are stored on the card itself.).

- 60. See Kashanchi v. Texas Commerce Med. Bank, 703 F.2d 936, 942 (5th Cir. 1983). See also Kolodner v. Philadelphia Nat'l Bank, No. CIV.A.87-7140, 1988 WL 68723 (E.D. Pa. June 28, 1988) (following Kashanchi); Abyaneh v. Merchants Bank, North, 670 F. Supp. 1298 (M.D. Pa.1987) (same).
 - 61. Wachter v. Denver Nat'l Bank, 751 F. Supp. 906, 908 (D. Col. 1990).
 - 62. 647 F. Supp. 1496, 1497 (D. Conn. 1987).
 - 63. Id. at 1500.

effort to execute such action" and involve "the electronic terminal of a computer which merely assist[s] the financial institution in its internal processing of the transaction."

Another court held that a customer's attempted deposit of a deposit slip and check into an automatic teller machine (ATM) that was canceled before it could be completed was a transaction "originated" by a check and thus outside the scope of EFTA, even though the ATM qualified as an "electronic terminal." 65

2. Issues of Regulatory Timing

Of particular relevance to the regulation of today's stored value cards is the Senate Report's endorsement of the ETFA despite arguments by the financial community that "legislation in this area is premature and that EFT should be left to develop in the marketplace without regulation." The Senate Banking Committee concurred:

it is desirable to minimize regulation at this time, but [we also believe] that EFT payment systems, which now involve billions of dollars annually and are growing in size, must have clearly defined rules to operate fairly, efficiently, and with public confidence. Moreover, the Committee believes this legislation will provide the dual benefits of allaying legitimate consumer concerns and providing a clear picture to EFT providers of what their liabilities would be, enabling them to make more informed decisions on participating in EFT systems . . . without imposing unnecessary restrictions on the continued development of these services.⁶⁷

Dissenting comments were lodged by, among others, Senators Schmitt, Tower, Morgan, Garn, and Lugar, who protested that:

[t]he burdensome regulation which would be generated by the Committee bill if enacted in its present form, would so load the system as to impede the development of a more efficient and less expensive funds transfer and payment mechanism. This added regulatory burden would tend to stifle competition and inhibit the entry of small business and small financial institutions into this market.

The history of the development of a modern payments system teaches that it would be imprudent to move too rapidly in this area to impose a regulatory straight-jacket on the development of technology....

The prudent course would be to go slow with federal legislation and to permit the states to move forward with experimentation in the area.⁶⁸

^{64.} Id.

^{65.} Curde v. Tri-City Bank, No. C.A.115, 1990 WL 151211 (Tenn. Ct. App. Oct. 11, 1990).

^{66.} S. Rep. No. 95-915 (May 26, 1978), reprinted in 1978 U.S.C.C.A.N. 9403.

^{67.} Id.

^{68.} Id. These legislators concluded that "if enacted in its present form, this overly broad, unnecessarily burdensome legislation would smother the evolution of a more convenient, less costly payments system." Id. Cf. Fry, supra note 2, at 685 (identifying "perhaps the most fundamental question" of electronic commerce as "[s]hould commercial law be reformed based on abstract analysis of the functions served by negotiability, thus operating proactively to create a pre-existing infrastructure against which markets may develop their specific practices? . . . Or should commercial law await commercial developments, operating reactively to develop infrastructures which support stable, evolved commercial practices?").

Although the Federal Reserve Board, in proposing revisions to Regulation E to govern stored value cards, found support in the legislative history of the EFTA, 69 the financial community disagreed. Pointing out that the EFTA had been enacted only after a four-year study by the National Commission on Electronic Fund Transfers, and after "[o]n-line ATM and POS debit cards were in the hands of consumers for years,"70 a smart card industry consortium, characterizing stored value programs in the United States as "still in their infancy," suggested that the Board "observe the development of stored-value systems closely in order to continuously re-assess whether to expand the definition of 'account' under Regulation E."71 Similarly, a credit card issuer commented that "[w]hile we do not suggest that a 4-year study is necessary, we do note that the electronic stored value industry is in its infancy,"72 and differentiated the loss of a stored value card from the loss of a debit or ATM card, on the grounds that the former usually put at risk only a limited portion of the consumer's bank account.⁷³ Another industry group reminded the regulators of the "two years of public study and debate"74 that preceded the enactment of the EFTA, which it characterized as "a very explicit piece of legislation that provides detailed rules for the regulation of the EFT systems that Congress knew or contemplated. Congress in 1978 did not contemplate stored-value systems."75

^{69.} The Proposal drew on the Act's legislative history for "guidance as to the Board's regulatory authority under the EFTA for determining issues of coverage," Proposal, *supra* note 4, at 19,699 (citing S. Rep. No. 915 (1978) ("definitions of 'financial institution' and 'account' [see supra notes 58, 59 and infra notes 91,92] are deliberately broad so as to assure that all persons who offer equivalent EFT services involving any type of asset account are subject to the same standards and consumers owning such accounts are assured of uniform protection")) Id. at 10 ("since no one can foresee EFT developments in the future, regulations would keep pace with new services and ensure that the act's basic protections continue to apply.") But see Comment Letter of Nessa E. Feddis, Senior Federal Counsel, American Bar Association, supra note 12, at 6 (construing legislative history as intending "that nonbanks were also subject to the regulation, not that the Board had the power to expand application of the regulation to products other than asset accounts" and that protection would be accorded not to "any and all consumers' assets that may be accessed electronically" but only to "significant or principal assets such as those held in deposit accounts at depository institutions.").

^{70.} Comment Letter of Robert Gilson, Executive Director, Smart Card Forum 3 (Aug. 26, 1996). The National Commission on Electronic Fund Transfers was created by Congress in 1974 to examine and report on issues including: the preservation of competition and fairness among the users of such transfer systems; maximum convenience, privacy, and confidentiality for users and consumers; the effect of these systems on economic and monetary policy and the availability of credit; the technological future of such systems; and the protection of the legal rights of their users and consumers. The LAW OF ELECTRONIC FUND TRANSFER SYSTEMS, *supra* note 22, at 12-19, 12-20.

^{71.} Comment Letter of Robert Gilson, *supra* note 70, at 4. See also Comment Letter of James A. Pihera, Senior Vice President, NationsBank 4 (Sept. 5, 1996) (recommending that, "as with the development of the ATM and debit systems, ... the Board study the development of ... stored-value systems and wait until they have sufficiently developed to establish regulatory coverage, if any is determined at that time to be appropriate.").

^{72.} Comment Letter of Judith Rinearson, supra note 49, at 5.

^{73.} Id. at 6.

Comment Letter of Kurt Helwig, Executive Director, Electronic Funds Transfer Association 2 (Sept. 6, 1996).

^{75.} Id. at 3.

3. Regulation E

Regulation E,⁷⁶ promulgated by the Federal Reserve Board in 1978, was "intended to carry out the purposes of the [Electronic Fund Transfer] Act, including, primarily, the protection of individual consumers engaging in electronic transfers."⁷⁷ The Regulation operates in five major areas: ensuring disclosure of terms; regulating the provision to the consumer of receipts and periodic statements; limiting the consumer's liability for unauthorized transfers; setting out error resolution procedures; and preventing the unsolicited issuance of devices with which consumers can access accounts. Much of the debate surrounding the proposed revisions to Regulation E concerned the practicality of requiring stored value cards to provide the first three of these protections to the consumer.

First, Regulation E requires that the financial institution disclose to the consumer, before the consumer's first electronic transfer of funds, the extent of her liability for unauthorized electronic transfers, as well as information regarding: fees; documentation of transactions; the procedure for stop-payment orders and the liability of the institution for failure to comply with such orders; confidentiality of information concerning the consumer's account; and error resolution procedures.⁷⁸

Second, the financial institution is required to furnish a receipt to the consumer "at the time the consumer initiates an electronic fund transfer at an electronic terminal" and must provide the consumer with a periodic "statement for each monthly ... cycle in which an electronic fund transfer has occurred, [and] ... at least a quarterly statement if no transfer has occurred."

Third, the regulation limits the consumer's liability for transfers that she did not authorize: in short,

^{76. 12} C.F.R. § 205 (1996).

^{77.} Id. at § 205.1(b).

^{78.} See 12 C.F.R. § 205.7(b) (1996). A list of the information to be disclosed initially also appears in Chart 3, infra pp. 394-95. A set of Model Clauses for Initial Disclosures is included as an Appendix to 12 C.F.R. § 205. Any change in terms or conditions included in the material provided to the consumer under this section must be provided to the consumer at least 21 days before the effective date of the change if the change would result in increased fees, liability, or transaction limitations to the consumer. Id. at § 205.8.

^{79.} *Id.* at § 205.9(a) (1996). That subsection also sets forth the types of information that the receipt must contain: the amount of the transfer; the date that the transfer was initiated; the type of transfer and the type of the consumer's account(s) to or from which the funds are transferred; a number or code that identifies the consumer's account or accounts, or the access device used to initiate the transfer; the location or other identification of the terminal where the transfer is initiated; and the name of any third party to or from whom funds are transferred. *Id.* at § 205.9(a)(1)-(6) (1996). A list of the information to be disclosed in a receipt also appears in Chart 3, *infra* pp. 394-95.

^{80. 12} C.F.R. § 205.9(b) (1996). For each transfer that occurred during the cycle, the periodic statement must indicate: the data set forth in § 205.9(a)(1)-(6); the number of the account; the amount of any fees assessed during the statement period for electronic fund transfers, for the right to make transfers, or for account maintenance; the balance in the account at the beginning and at the close of the statement period; the address and telephone number for inquiries; and a telephone number for preauthorized transfers. *Id.* at § 205.9(b)(1)-(6). A list of the information to be disclosed in a periodic statement also appears in Chart 3, *infra* pp. 394-95.

[a] consumer may be liable for (1) up to \$50; (2) up to \$500; or (3) an unlimited amount depending on when the unauthorized EFT occurs. More than one tier [of liability] may apply to a given situation because each corresponds to a different (sometimes overlapping) time period or set of conditions.⁸¹

Fourth, the regulation provides error resolution procedures which the consumer may initiate by giving oral or written notice of an alleged error to the financial

81. Official Staff Interpretation of § 205.6(b), 12 C.F.R. Pt. 205 (Supp. I 1996). Under 12 C.F.R. § 205.6(b)(6), "unless state law or an agreement between the consumer and the financial institution imposes less liability" (emphasis added), the following subsections of § 205.6(b) determine the consumer's liability for unauthorized transfers:

A consumer's liability for an unauthorized electronic fund transfer or a series of unrelated authorized transfers shall be determined as follows:

- (1) Timely notice given. If the consumer notifies the financial institution within two business days after learning of the loss or theft of the access device, the consumer's liability shall not exceed the lesser of \$50 or the amount of unauthorized transfers that occur before notice to the financial institution.
- (2) Timely notice not given. If the consumer fails to notify the financial institution within two business days after learning of the loss or theft of the access device, the consumer's liability shall not exceed the lesser of \$500 or the sum of:
- (i) \$50 or the amount of unauthorized transfers that occur within two business days, whichever is less; and
- (ii) The amount of unauthorized transfers that occur after the close of two business days and before notice to the institution, provided the institution establishes that these transfers would not have occurred had the consumer notified the institution within that two-day period.
- (3) Periodic statement; timely notice not given. A consumer must report an unauthorized electronic fund transfer that appears on a periodic statement within 60 days of the financial institution's transmittal of the statement to avoid liability for subsequent transfers. If the consumer fails to do so, the consumer's liability shall not exceed the amount of the unauthorized transfers that occur after the close of the 60 days and before notice of the institution, and that the institution establishes would not have occurred had the consumer notified the institution within the 60-day period. When an access device is involved in the unauthorized transfer, the consumer may be liable for other amounts set forth in paragraphs (b)(1) or (b)(2) of this section, as applicable.
- (4) Extension of time limits. If the consumer's delay in notifying the financial institution was due to extenuating circumstances, the institution shall extend the times specified above to a reasonable period.

12 C.F.R. § 205.6(b) (1996).

More generally, the italicized language above and other such references to state law have led to concern that state legislatures may regulate stored value cards more strictly than the federal government, thus creating what financial institutions characterize as "significant problems for the nationwide payment system that is currently in its infancy with respect to stored value cards and stored value or electronic cash systems." Comment Letter of Daniel W. Morton, Vice President and Counsel, The Huntington National Bank 6 (Aug. 1, 1996). The most restrictive, or "lowest common denominator," of the state laws applicable to a stored value card system would tend to govern the nationwide use of that system. *Id.* at 7. Thus, the bank suggested that the Board consider "whether it would be appropriate to propose legislation to Congress that would preempt outright any state laws relating to disclosure requirements and other substantive requirements (such as error resolution and liability for unauthorized use) for stored value cards and systems." *Id: See also* Comment Letter of Robert Gilson, *supra* note 70, at 5; Comment Letter of Stanhope A. Kelly, Senior Vice President, Wachovia Corporation 1 (Sept. 5, 1996).

institution "no later than 60 days after the institution sends the periodic statement or provides the passbook documentation... on which the alleged error is first reflected." 82

Fifth, a financial institution may issue cards, codes, or other device allowing access to a consumer's account only "[i]n response to an oral or written request... for the device" [a]s a renewal of, or in substitution for" such a device that the consumer has already accepted (or if the device is not "validated" and can be activated only by a written or oral request from the consumer.

B. "Accounts"

In its attempt to distinguish different types of stored value cards for purposes of applying Regulation E, the Federal Reserve Board of Governors focused on whether each type could be said to have established an underlying "account" with the issuer of the card. However, in this context the Board was generally reduced to arguing by analogy -- analogies which commentators on the proposal promptly attacked.

Like the EFTA, Regulation E defines the rights and responsibilities of consumers and financial institutions who are linked by transaction systems that feature cards or other "access devices" by which a consumer can gain access to the funds in his or her "account." Where the EFTA regulates the use of "an accepted card or other means of access" to an account, Regulation E defines an "access device" as "a card, code, or other means of access to a consumer's account, or any combination thereof, that may

^{82.} See 12 C.F.R. § 205.11(b) (1996). Similar provisions appear in the EFTA at 15 U.S.C. § 1693f (1994).

^{83. 12} C.F.R. § 205.5(a)(1) (1996).

^{84. 12} C.F.R. § 205.5(a)(2) (1996).

^{85. 12} C.F.R. § 205(b) (1996). Cf. 12 C.F.R. 226 § 12(a) (prohibiting issuance of credit cards to any person except "[i]n response to an oral or written request or application for the card" or "[a]s as renewal of, or substitute for, an accepted credit card."). That provision is contained in Regulation Z, 12 C.F.R. § 226, which as the credit-card-related counterpart of Regulation E generally promotes disclosures about credit terms and cost, "regulates certain credit card practices, and provides a means for fair and timely resolution of credit billing disputes." 12 C.F.R. § 226.1(b) (1996).

^{86.} This term was defined to include:

a card, code, or other means of access to a consumer's account for the purpose of initiating electronic fund transfers when the person to whom such card or other means of access was issued has requested and received or has signed, or has used, or authorized another to use, such card or other means of access for the purpose of transferring money between accounts or obtaining money, property, labor, or services.

¹⁵ U.S.C. § 1693a(1) (1994).

be used by the consumer...[to] initiate electronic fund transfers."⁸⁷ Both the EFTA⁸⁸ and Regulation E⁸⁹ cover transactions made with debit cards.⁹⁰

87. 12 C.F.R. at § 205.2(a)(2) (1996). The Official Staff Interpretation of this definition states that the term:

access device includes debit cards, personal identification numbers (PINs), telephone transfer and telephone bill payment codes, and other means that may be used by a consumer to initiate an electronic fund transfer (EFT) to or from a consumer account. The term does not include magnetic tape or other devices used internally by a financial institution to initiate electronic transfers.

Id. at § 205, Supp. I.

- 88. Debit cards fall under the category of "debit instrument," which includes any "card, code, or other similar device, other than a check, draft, or similar paper instrument, by the use of which a person may initiate an electronic fund transfer." 15 U.S.C. § 1693n(c) (1994).
- 89. Regulation E defines "electronic fund transfer" to include "[t]ransfers resulting from debit card transactions, whether or not initiated through an electronic terminal." 12 C.F.R. § 205.3(b)(5) (1996). In proposing to extend the applicability of Regulation E to transfers resulting from debit card transactions that do not involve an electronic terminal at the point of sale but that are later processed electronically by the merchant's financial institution, which truncates the sales slips and submits the data electronically to the financial institutions holding the consumers' accounts, the Federal Reserve Board asserted that "[t]he transfers resulting from POS transactions are as much the result of the use of a debit card as are transfers with debit cards at ATM's or at electronic terminals at points of sale" and identified the crucial element of the transfer as "whether there is electronic ordering, instructing, or authorizing involved in the debiting or crediting of a consumer asset account." Electronic Fund Transfers: Proposed Rule and Proposed Update to Official Staff Commentary, 49 Fed. Reg. 2204, 2205 (Jan. 18, 1984). At that time, approximately 90% of point-of-sale transations using debit cards were made at such non-electronic terminals. Id. at 2206. Announcing the final revisions to Regulation E in this context, the Board noted that they would "avoid a situation in which a consumer's protections when using a debit card would depend on whether a merchant and the consumer do business with the same [financial] institution." 49 Fed. Reg. 40794, 40794 (Oct. 18, 1984).
- 90. Debit cards are sometimes misleadingly characterized as hybrids of credit cards and automatic teller machine (ATM) cards. Like ATM cards, debit cards offer the consumer the ability to withdraw cash from automatic teller machines. See, e.g., Transactive Corp. v. United States, 91 F.3d 232, 234 (D.C. Cir. 1996) (in the context of withdrawing funds from consumer's bank account, a debit card is "similar to" an ATM card). But see Matter of Kimberly H., 609 N.Y.S.2d 990, 991 (N.Y. App. Div. 1994) (finding that ATM card does not qualify under the relevant definitions in New York's General Business Law either as a debit card or as a credit card).

Debit cards also allow the consumer to "charge" purchases; however, unlike credit card charges, the amount of such purchases is automatically and almost immediately deducted from the consumer's checking account. See, e.g., First Union, CheckCard . . . The Card that works like a Check (consumer brochure) (1994) ("Simply present CheckCard to any VISA(c) merchant and your purchases are deducted right from your checking account. CheckCard is not a credit card. So you pay no interest.") First Union also promises its debit card customers that "[y]ou receive a receipt each time you make a purchase with CheckCard. Simply enter this amount in your checkbook, just as you would with any other ATM receipt. Your purchases will be detailed on your monthly checking account statement—merchant name, location and amount of purchase." Id.

Nor is the comparison of debit cards to checks always compelling. In 1992, an Air Force Court of Military Review found an apparently forthcoming defendant's guilty plea, statements to the trial judge, and stipulation of facts so unclear on the mechanics of a debit card's operation that the court could not determine whether his fraudulent payment of hotel charges with such a card constituted fraud by "check, draft, or order for the payment of money" within the appropriate military regulation. See United States v. Phrampus, 34 M.J. 607, 611 n.3 (noting that the issue was one of first impression under the Uniform Code of Military Justice and that "[w]ithout knowing the precise characteristics of the [payment] mechanism

The definitions of "account" under Regulation E⁹¹ and under the EFTA⁹² are roughly parallel. Both the Regulation and the Act refer, without elaboration, primarily to a "deposit account," yet neither defines it. However, the definitional section of the Federal Deposit Insurance Act defines "deposit" as:

the unpaid balance of money or its equivalent received or held by a bank or savings association in the usual course of business and for which it has given or is obligated to give credit, either conditionally or unconditionally, to a commercial, checking, savings, time, or thrift account, or which is evidenced by its certificate of deposit, . . . or a check or draft drawn against a deposit account and certified by the bank or savings association, or a letter of credit or a traveler's check on which the bank or

involved, it will be impossible to assess whether it falls within the purview of the Code section that the defendant had acknowledged violating). *Id.*

Although banks issuing debit cards can profit in several different ways from the transaction -through merchant "exchange" fees of 1% to 2% of the transaction value, through monthly charges
imposed on customers for use of the card, and through the lesser costs to process such transactions than
to process check transactions -- consumers face several major risks in using debit cards. See Alexandra
Alger, Carte Blanche for Crooks, FORBES, Dec. 2, 1996, at 272, 274 (detailing instances and extent of
debit card fraud). See also Sears, Others Join Suit Involving MasterCard and Visa Debit Cards, WALL
ST. J., Feb. 11, 1997, at B9 (retailers and trade groups allege that, although debit card transactions carry
much less risk of consumer default, card issuers unfairly charge the same fee to merchants for debit cards
as for credit cards).

First, under Regulation E, see supra note 81, a lost or stolen debit card can lead to the customer's checking accounts being wiped out. Carte Blanche for Crooks, supra, at 272. Unlike the credit card situation, the consumer's liability is not limited to \$50, unless the consumer reports the loss within two days. If the loss is reported within three to 60 days, the consumer can be liable for up to \$500. After 60 days have passed, the consumer can be liable for as much as the entire balance of the bank account. Id. Cf. 15 U.S.C. § 1643(a)(1)(B) (1994) (limiting to \$50 the consumer's liability for unauthorized use of credit card). Ellen Stark, What You Need to Know About Debit Cards' Explosive Risks, MONEY, Oct. 1995, at 44. See also The New World of Debit Cards, Consumer Reports, June 1990, at 422 (for this reason, "a debit card can be a time bomb in dishonest hands."); Jane Bryant Quinn, 'Debit' Card Fraud is Growing But Laws Offer Little Protection, WASH. POST, June 6, 1983, at 1 (recommending that consumers never reveal personal identification number to others, always open monthly statement as soon as it arrives, and double-check all withdrawals on statement.).

Second, even a properly used debit card will cost the consumer the credit float that she would get with a zero-balance credit card. Finally, unlike a credit card, a debit card does not allow the consumer to withhold payments for disputed charges. *Carte Blanche for Crooks, supra*, at 272.

- 91. 12 C.F.R. § 205.2(b) (1996). Under Regulation E, an "account" is "a demand deposit (checking), savings, or other consumer asset account (other than an occasional or incidental credit balance in a credit plan) held either directly or indirectly by a financial institution and established primarily for personal, family, or household purposes." *Id.* The Proposal would revise the Regulation's current definition of "financial institution," *see supra* note 59, to include "any person that, directly or indirectly, holds an on-line or off-line stored-value account, or that issues a card to a consumer for use in obtaining cash or purchasing goods or services by accessing such an account." Proposed § 205.16(b)(3).
 - 92. See 15 U.S.C. § 1693(a)(2). The EFTA defines "account" as a demand deposit, savings deposit, or other asset account..., as described in the regulations of the Board, established primarily for personal, family, or household purposes, but such term does not include an account held by a financial institution pursuant to a bona fide trust agreement.

savings association is primarily liable [and any] outstanding... cashier's check [or] money order... issued in the usual course of business for any purpose.⁹³

Also within the definition of account under the Regulation and the Act are savings accounts and asset accounts, the latter of which, noted the Board, is "not limited to traditional checking and other deposit accounts [but] includes such accounts [as] a consumer's money market mutual fund or other securities account held by a broker-dealer." This issue appeared in later debates over the nature of stored value cards, as various members of the regulated community compared a bank's obligation under a

^{93. 12} U.S.C. § 1813(1)(1), (4) (1989).

^{94.} Proposal, *supra* note 4, at 19,699. *See also* Official Staff Interpretation of Regulation E, 61 Fed. Reg. 19,678, 19,686 (May 2, 1996) ("consumer asset account" includes "club accounts, such as vacation clubs" and retail repurchase agreements ("repos")).

In its Proposal, the Board added that the term "account" includes "accounts established by government agencies under electronic benefit transfer (EBT) programs." Proposal, *supra* note 4, at 19,699 (citing 59 Fed. Reg. 10,678 (Mar. 7, 1994)) (final rule to amend Regulation E to cover EBT programs established by federal, state, or local government agencies, but exempting such programs, under certain circumstances, from requirement to provide periodic statements). *See also* Mark E. Budnitz, *Electronic Money in the 1990's: A Net Benefit or Merely a Tradeoff?*, 9 GA. ST. U. L. REV. 747, 759 (1993) (indicating that EBT's may be much more efficient than existing check-based benefit systems because EBT's eliminate need for paper checks and lessen problem of lost, stolen, or destroyed checks).

In its March 7, 1994 final rule on EBT's, the Board had delayed the date of mandatory compliance until March 1, 1997. In the interim, however, partly as the result of state officials' concerns about the cost of compliance with (and about states' potential liability for unauthorized transfers under) the EFTA and Regulation E, Congress enacted the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Pub. L. 104-193, 110 Stat. 2105), which exempted "needs-tested" EBT programs established or administered under state or local law. In response, the Board proposed conforming amendments to Regulation E. 62 Fed. Reg. 3,242, 3,242-43 (Jan. 22, 1997). See also Comment Letter of Western Governors' Association 2 (July 9, 1996) (objecting, on behalf of "governors from the eighteen western states and three Pacific flag islands," that "except in rare cases, no state now replaces lost or stolen benefits. [Regulation E] would make states fully liable for replacing lost or stolen benefits after the first \$50. It would also make states responsible for the administrative costs of handling, investigating, and replacing benefits. The fiscal aspects of this could be staggering."). When the comment period ended on February 19, 1997, only one response had been received. See Letter of Margaret Kelly, President, National Association of State Auditors, Comptrollers and Treasurers, to The Hon. William W. Wiles, Secretary, Board of Governors, Federal Reserve System 1 (February 4, 1997) (commending the Board, on behalf of the Association, for its proposed amendments and adding that "[t]he states believe that exemption from the provisions of EFTA relating to replacement of benefits is critical to the continued expansion of this delivery of service to program recipients.").

^{95.} See, e.g., infra note 152 and accompanying text.

stored value card to its obligation under a cashier's check,⁹⁶ teller's check,⁹⁷ or traveler's check,⁹⁸

Of the very few reported decisions that concern the definition of account under either the Electronic Fund Transfer Act or Regulation E, one emphasizes the reluctance of courts to deprive consumers of the protections of Regulation E. In Cobb v. Monarch

96. A cashier's check is defined by the Uniform Commercial Code as "a draft with respect to which the drawer and drawee are the same bank or branches of the same bank." U.C.C. § 3-104(g) (1995).

In general, because a bank's issuance of a cashier's check is also automatically that bank's acceptance of that check,"the bank's obligation to pay [a cashier's check] is absolute. The purpose of this rule is to make cashier's checks as much like cash as possible [so that they] may provide the certainty of payment while retaining the security of a named payee." Henrickson v. First Natl. Bank of Minnetonka, 14 B.R. 474, 478 (Bankr. D. Minn. 1981). *Cf.* Santos v. First Nat'l. Bank, 451 A.2d 401, 405 (N.J. Super. Ct. App. Div. 1982) ("Although the common belief is that cashier's checks are cash equivalents, the provisions of [pre-1990 version of the] Uniform Commercial Code give no indication of how cashier's checks are to be treated[, thereby creating] a good deal of confusion."); DaSilva v. Sanders, 600 F. Supp. 1008, 1010 (D.D.C. 1984).

However, the analogy to cash is not complete. Indeed, much judicial attention has been paid to identifying the exceptions to the general rule, both in the context of the bank's own refusal to honor the check and in the context of a "stop payment" request made to the bank. See, e.g., Henrickson, 14 B.R. at 478 (exceptions have been limited and narrowly construed); DaSilva, 600 F. Supp. at 1010 (noting sharp division among courts in other jurisdictions concerning when bank has defense to paying cashier's check); Rezapolvi v. First Nat'l. Bank, 459 A.2d 183, 189 (Md. 1983) (discussing "limited conditions" under which a bank may dishonor its cashier's check). As one court has found, "it is a mistake to conclude that cashier's checks are like cash in all situations. Rather, their cash-like nature depends on the extent to which various [Uniform Commercial] Code provisions bar the interposition of defense to payment, including defenses of third parties." Santos, 451 A.2d at 406.

97. The Uniform Commercial Code defines a teller's check as "a draft drawn by a bank (i) on another bank, or (ii) payable at or through a bank." U.C.C. § 3-104(h) (1995). Like a cashier's check, "a teller's check is generally treated in the commercial world as cash equivalent." See Savemart, Inc. v. Bowery Sav. Bank, 416 N.Y.S.2d 144, 145 (N.Y. App. Term. 1982). However, a teller's check is treated by the Code more like an ordinary check, especially with regard to the drawer bank's ability as the customer to stop payment on its teller's check prior to acceptance or certification. See, e.g., Lo Monaco v. Belfiore, 572 N.Y.S.2d 315 (N.Y. App. Div. 1991) (bank issuing teller's check could stop payment); Meritor Sav. v. Duke, 22 U.C.C. Rep. Serv. 833 (Va. Ct. App. 1993) (teller's check at issue had the characteristics of ordinary check).

98. A traveler's check is defined by the Uniform Commercial Code as: an instrument that is (i) payable on demand, (ii) is drawn on or payable at or through a bank, (iii) is designated by the term 'traveler's check,' or by a substantially similar term, and (iv) requires, as a condition to payment, a countersignature by a person whose specimen signature appears on the instrument.

U.C.C. § 3-104(i) (1995). Traveler's checks are preferable to teller's checks or cashier's checks for traveling precisely because "[t]ravelers checks do not become cash equivalents until they are signed in the presence of the acceptor under circumstances that do not put the acceptor on notice of the forgery." Xanthopoulos v. Thos. Cook, Inc., 629 F. Supp. 164, 174 (S.D.N.Y. 1985). Indeed, in concluding that these instruments "should be subjected to the same rules of law applicable to money under like circumstances," one court observed that "[t]he public is made to believe that travelers checks are a substitute for money, a medium of exchange, which are self-identifying and accepted everywhere, but, unlike currency, they can be carried without danger of loss or theft because of the protective device of signature and countersignature." Ashford v. Thos. Cook & Son (Bankers) Ltd., 471 P.2d 530, 534 (Haw. 1970).

Finance Corp., 99 each of the loan agreements signed by the borrower allegedly authorized the creation of a separate bank account on her behalf by the corresponding finance company, to which account allocated portions of her paycheck were electronically and directly deposited. Each finance company then transferred these allotments from the borrower's account to its own account in the same bank. 100 The plaintiff asserted that the loan agreements attempted to extinguish her rights to receive account statements or transaction reports from these accounts. 101 The court rejected the finance companies' motions for summary judgment, holding that the plaintiff had stated a claim under the EFTA's definition of "account" as a bank account "established primarily for personal, family, or household purposes." 102

IV. PROPOSED AMENDMENTS TO REGULATION E

In its attempt to clarify the application of Regulation E to various types of stored value systems the Federal Reserve Board classified these systems by the manner "in which value stored on a card is drawn down to obtain cash or purchase goods or services." The Board's proposed categorization process involves two factors.

The first criterion is whether the user of a card is required when engaging in a transaction to obtain on-line authorization from a central database — that is, whether the transaction is accomplished "on-line" or "off-line." The second factor is whether the use of the card produces a record in a data facility external to the card itself of the balance of available funds that can be accessed through the card — that is, whether the card is "accountable" or "unaccountable." ¹⁰⁴

Unaccounted systems may pose risks to the issuer because there are no records to rectify any problems that might arise. However, consumers may not feel comfortable using accounted electronic money for some transactions which they can currently conduct anonymously with cash. In addition an accounted system may impose costs on merchants and e-money issuers that would be passed on to consumers. These costs may be excessive relative to the benefits that consumers receive if electronic money is used for only small value transactions. In contrast, consumers may prefer accounted systems when they wish to have an independent

^{99. 913} F. Supp. 1164 (N.D. III. 1995).

^{100.} Id. at 1169.

^{101.} Id. at 1170-71.

^{102.} Id. at 1174 (citing 15 U.S.C. § 1693(a)(2) (1994)). The court interpreted this phrase in the light of similar language in the Truth in Lending Act (TILA), 15 U.S.C. §§ 1601-1667e, which defines "consumer credit transaction" as one in which "the money, property, or services which are the subject of the transaction are primarily for personal, family, [or] . . . household purposes." 15 U.S.C. § 1602(h). Examining, as in a TILA inquiry, the transaction as a whole, and in light of the entire surrounding factual circumstances, the court held that the plaintiff's accounts met the EFTA definition of "account" because "[u]sing the accounts to repay the loans— which were made to Cobb in her personal capacity and for no apparent business purpose— represented a personal purpose for the bank accounts." Cobb, 913 F. Supp. at 1175.

^{103.} Proposal, *supra* note 4, at 19,699. "[I]n all three types of systems, a transaction in which a stored-value card is used to access a consumer's deposit account, such as 'reloading' the card by drawing on the consumer's checking account at an ATM, is covered by regulation E and subject to all Regulation E requirements." *Id.* For these purposes, the stored value card would qualify as an "access device" within the meaning of the EFTA and Regulation E. *See supra* notes 86 and 87 and accompanying text.

^{104.} See also SELECTED TAX POLICY IMPLICATIONS, supra note 12, at 16. Using slightly different terminology than "accountable" and "unaccountable," the Department of Treasury's Office of Tax Policy concluded that

To the Board, the permutations of these two factors produced three viable types of stored value systems: off-line unaccountable; off-line accountable; and on-line accountable (or, "more generically, 'on-line' stored value systems"). 105

A. Off-Line Unaccountable Stored Value Systems

In the simplest type of system, an "off-line unaccountable stored value system," stored value cards do not require on-line authorization. Moreover,

the record of value is maintained only on the card itself, and not in a central database. Transaction data for debits to the card's "stored value" are recorded on the card and captured at merchant terminals (where they are maintained for a limited period of time). Only the aggregate amount of transactions for a given period is transmitted by the merchant to a financial institution or other entity so that the merchant can receive credit.¹⁰⁶

Common types of cards such as photocopy cards and some forms of transit cards fall within this group. ¹⁰⁷ These are often, but not always, the magnetic stripe cards and the "memory" type of smart cards that are intended to be discarded after use; indeed, according to one account, at a Federal Reserve Board advisory group meeting, "[b]ankers and activists" apparently agreed that "smart cards that can be thrown out [should be called] 'disposable,' rather than 'off-line, unaccountable'" as under the Board's proposed revision. ¹⁰⁸

Because "transaction approval and data retention occur[s] only at the merchant level" and does not involve "a centrally maintained, ongoing record of individual

record of the transaction [such as for tax purposes].

Id. In this respect, "[w]hile unaccounted electronic systems are unlikely to completely displace other payment systems, the tax evasion potential they create could be substantial." Id. at 38.

105. These features of these three types of stored value systems and the Board's proposal for their treatment under a revised Regulation E are set out graphically in Chart 2, *infra* p. 393.

An on-line *unaccountable* system, in which transaction authorization would be required but there would be no record of the card's balance other than on the card, was apparently not considered. *See* Comment Letter of Daniel W. Morton, *supra* note 81, at 11 (suggesting that "the Board fails to recognize a type of card where the record of the balance is maintained on the card, but an on-line authorization is either required or available to be used if the card is used in an on-line setting. It is our understanding that such cards exist.").

In such a system, on-line authorization might involve merely an authentication of the card's ability to enter into a specific transaction, perhaps, for instance, by verifying that the card contained a certain security or personal code unrelated to any balance of value stored on or accessible through the card.

- 106. Proposal, supra note 4, at 19,699.
- 107. Id. at 19,701.

108. Jaret Seiberg, Bankers and Activists Clash on How Far Fed Should Go in Regulating Smart Cards, Am. Banker, Apr. 4, 1996, at 11. The Proposal does not indicate the types of stored value cards that would be involved in off-line accountable and on-line accountable stored value systems. Presumably smart cards, with their enhanced memory capacity and their ability to process information, would be the leading features of such systems. However, memory cards and even magnetic stripe cards might be involved in such systems.

109. Proposal, *supra* note 4, at 19,698. The fact that in this type of customer-merchant transaction, as in the other types, "the issuer has no ability to intervene in the completion of a transfer, or to verify that a transfer has been authorized," and that "verification occurs instead as part of internal communication

as:

card balances or of transaction data in these systems, [the Board found it] difficult to conclude that an 'account' exists for purposes of Regulation E."¹¹⁰ Accordingly, the language of the proposed revisions, by not capturing the definition of off-line unaccountable systems, implicitly exempted them from the scope of Regulation E. Although it anticipated that this exemption would encourage off-line stored value systems to be designed as unaccountable rather than as accountable, the Board concluded that such an effect would be "minimal when compared to other factors that could affect system design (for example, the transaction data collected in accountable systems may be useful for various purposes including fraud detection and marketing).

B. Off-Line Accountable Stored Value Systems

Transactions involving the second type of system, an "off-line accountable stored value system," are accomplished "off-line" in the sense that "there is no authorization of transactions by communication with a database at a financial institution or elsewhere." 112

However, unlike an off-line unaccountable system,

the balance of funds available is recorded on the card, but is also maintained at a central data facility at a bank or elsewhere Transaction data are periodically transmitted to and maintained by a data facility. As in the case of the traditional consumer deposit account accessed by a debit card, in these stored-value card systems a consumer has the right to draw upon funds held by an institution. 113

In this context, the Board's proposal defined an "off-line stored-value account"

a balance of funds recorded on a card that a consumer may use at electronic terminals to obtain cash or purchase goods or services, where the record of such balance is also maintained on a separate database, apart from the card, and where on-line authorization of transactions is not required to access the funds.¹¹⁴

between the [card and the merchant's reader], which stand alone," "is part of the inherent utility of the system, and important to its commercial future." Comment Letter of R. David Whitaker, Vice President and Assistant Director of Legal Services, Bank of Oklahoma 1-2 (Sept. 5, 1996).

Nor must the issuer necessarily be involved in the transfer of stored value from one customer to another. See Proposal, supra note 4 (noting that "[a]t least one system (now in the pilot stage) would enable the consumer to transfer stored-value balances to another person's card"); Comment Letter of Dudley M. Nigg, Executive Vice President, Direct Distribution, Wells Fargo & Co. 2 (Sept. 5, 1996) (observing that, because some or all of the 'value' on the card or device can . . . be transferred to yet another card or device without any direct authorization or other linkage to a consumer's asset account[,] the determination of whether an "account" exists must involve a critical analysis of the functionality of this unique ability to transfer 'value' from one storage device to another.).

- 110. Proposal, supra note 4, at 19,699.
- 111. *Id.* at 19,702. However, the Board solicited comment on whether requirements should be imposed on these systems, particularly in light of their potential to handle high stored values and of the possibility that "they could evolve into systems that capture and maintain some transactions in a location other than on cards and at merchant terminals." *Id.*
 - 112. Id. at 19,699.
 - 113. Id.
 - 114. Proposed § 205.16(b)(1), Proposal, supra note 4, at 19,704.

An example of such a system is the New York Metropolitan Transit Authority's MetroCard system, in which "[t]he balance of funds available is recorded on the card. In addition, [apparently as a method of preventing fraud] the current system maintains a central database that creates a record of every transaction associated with every card during the period that the card is valid." Off-line accountable stored value cards have historically been favored over on-line cards in Europe, "where [telephone] calls are generally more expensive and connecting modem-equipped devices to phone lines is more difficult" than in the United States. 116

Because there exists a record of value and transactions for a given off-line accountable stored value card separate from the card itself and the transactions entered involving a given card can be traced to that card the Board found that the operation of such a system "strongly parallels the functioning of a deposit account. The Board believes that the facts support a finding that such systems involve an account for purposes of the EFTA." This swift transition from analogy to conclusion would be the subject of much criticism. 118

However, despite the apparent existence of an "account," the Board proposed that several key consumer safeguards of Regulation E not apply to off-line accountable systems. First, the card issuer would not be required to provide to the consumer any transaction receipts or periodic statements of account, since such "documentation requirements could present compliance difficulties and considerable costs, while providing only limited benefits to consumers." Indeed, as with off-line unaccount-

115. Comment Letter of Michael Vaccari, *supra* note 24, at 2 (remarking that "[t]he MetroCard system is an off-line accountable system as described in the proposed rule.") See also Comment Letter of Richard A. White, General Manager, Washington Metro Area Transit Authority 3 (Sept. 5, 1996) (observing that because "[d]aily usage of each card is downloaded to [the Authority's] central computers ... this card would be classified as an 'off-line accountable stored-value system"); Comment Letter of Ezra C. Levine, Esq., supra note 27, at 3 (observing that "newly-installed [fare card] systems such as those installed in New York City and Chicago, as well as current upgrades employing smart card technology in Washington, D.C. appear to be 'off-line accountable stored-value' systems because maintenance of a record of transactions traceable to the individual card (not person) will be maintained on a central computer. This procedure is used as a fraud control measure, as it is possible with this new technology to detect cards for which usage has exceeded pre-payment.").

However, Mr. Vaccari suggested that a contemplated modification to the current system -- "to maintain a central record of only a limited number of transactions -- such as for the previous month or the last ten transactions"-- would move the MetroCard into the category of off-line *unaccountable* system. Comment Letter of Michael Vaccari, *supra*, at 2.

- 116. Fancher, *supra* note 16, at 41. *See also* EMERGING ELECTRONIC METHODS, *supra* note 13, at 12 ("The infrastructure for data communications abroad is less well developed than in the United States, and calls needed for centralized verification and authorization are relatively more expensive. In such circumstances, [off-line] stored-value cards can thrive.").
 - 117. Proposal, supra note 4, at 19,699.
 - 118. See infra Sections VI.A and VI.B.
- 119. Id. at 19,700. See, e.g., the (somewhat understated) Comment Letter of Michael Vaccari, supra note 24, at 3-4:

MTA plans to include the purchase and installation of up to 2,800 automated vending machines (AVMs) which will accept debit and credit cards in addition to cash and coin. The receipt printers on these machines add approximately \$400 to the initial cost of each machine. In addition, there are paper and maintenance costs which add an estimated \$1,000 per year to the operational costs per machine. Moreover, the receipt printer is a weak link-if it goes out of service, the machine can no longer accept debit cards. The New York City

able stored value systems, off-line accountable transactions are generally for small amounts, through terminals not equipped with printers, by customers who do not need or want receipts.¹²⁰

In addition, because the amount stored on such a card is usually small, the Bank proposed to exempt these cards from Regulation E's limitation of consumer liability for access devices (which generally operates to a maximum of \$50)¹²¹: a consumer losing his or her off-line accountable stored value card would lose the entire value on the card, or at least so much as he or she had been warned about in the initial disclosure. Moreover, since "most providers of stored-value products will likely issue stored-value cards only to consumers who request them," the Board would lift Regulation E's prohibition on issuing an "access device" to a consumer who had not asked for it. Significantly, this restriction would remain if the card, like a debit card, "could access a consumer's existing deposit account, where the rules [of Regulation E] already apply." 123

To prevent the public from confusing an off-line unaccountable card with a debit card, the Board proposed to retain the Regulation E requirement of initially disclosing the terms and conditions of service, including the consumer's liability for unauthorized transfers, error-resolution procedures, limits on the frequency or dollar amount of transfers, and any fees or charges. ¹²⁴ "Such disclosures would be useful in alerting consumers to important features of these new services, such as transaction charges and risk of loss for lost or stolen cards." ¹²⁵

However, the Board would completely exempt from the requirements of Regulation E those off-line accountable devices that, whether reloadable or not, can hold a maximum of \$100 at a given time: "[that] amount of risk would be sufficiently minimal that application of even modified Regulation E protections appears unnecessary." In commenting on the Board's proposal, several financial institutions supported this exemption¹²⁷ but a greater number recommended that its \$100 limit be

subway system is particularly challenging for equipment of this kind.

We believe that the MetroCard itself provides an adequate receipt for the customer. In addition to the transaction being recorded on the card through the increase in value, a transaction record will be maintained centrally by both the ATM switch and/or participating financial institutions, as well as by the MTA host databases. The transaction can be cross-referenced to both the ATM card number as well as the MetroCard serial number.

Id.

- 120. See Proposal, supra note 4, at 19,700-701.
- 121. See supra note 81 and Comment Letter of Kurt Helwig, supra note 74.
- 122. Proposal, *supra* note 4, at 19,701.
- 123. Id. at 19,700.
- 124. *Id.* The Board's proposed disclosure requirements for different types of stored value systems are summarized in Chart 3 *infra* pp. 394-95.
 - 125. Id.
 - 126. Id. at 19,701.
- 127. See, e.g., Comment Letter of Stuart Lehr, V.P. and Manager, Corporate Compliance Division, U.S. Bancorp 6 (Aug. 9, 1996); Comment Letter of Susan E. Smith, Regulatory Specialist, Michigan Credit Union League 2 (Aug. 28, 1996) ("Credit unions unanimously agree that" systems limiting consumers to maximum of \$100 per card should be exempt from Regulation E requirements); Comment Letter of Michael J. Broker, Vice President, USAA Federal Savings Bank 3, 5 (Sept. 4, 1996) (supporting \$100 de minimis exclusion for off-line accountable and on-line accountable systems); Comment Letter of Peter C. Freund, supra note 12, at 2 (supporting \$100 de minimis exemption for on-line systems);

raised.¹²⁸ Yet two consumer advocates opposed the safe harbor generally, on the grounds that it would disproportionately disadvantage consumers with low incomes.¹²⁹

C. On-Line (Accountable) Stored Value Systems

A third type of system involves transactions which must be "authorized by communications between a terminal and a central database" that itself maintains the sole record of information concerning the balance of the account:

That is, when the card is used at an ATM or a POS terminal, the transaction is authorized by means of on-line communication with the data facility where the

Comment Letter of Roberta Griffith Torian, Senior Counsel, PNC Bank 8 (Sept. 5, 1996) (supporting proposed exemption and recommending that it apply "regardless of whether the card is capable of storing value in excess of \$100 so long as the value on the card does not exceed \$100.").

128. See, e.g., Comment Letter of Michael Vaccari, Metropolitan Transportation Authority, supra note 24, at 2 (recommending raising limit because "[w]ith a perpetual \$100 maximum balance limit, many of our customers will be required to undertake multiple value-loading transactions per month."); Comment Letter of Thomas J. D'Allesandro III, Delivery Systems Coordinator, Wilmington Trust 1-2 (July 22, 1996) (this limit may be found to be reached when consumer has less than \$100 in "electronic purse" function on card if other application, for example, transit application, stored other value; proposing "initial \$250 liability limit exemption cap" to "permit future growth and application development for stored value cards."); Comment Letter of Rose M. Oswald Poels, Vice President-Legal, Wisconsin Bankers Association 2 (Aug. 21, 1996) ("WBA believes that \$100 is not a significant amount of money in today's dollars and, therefore, the dollar amount figure should be set at \$500 in order to reduce regulatory burden while maintaining ample protection for consumers."); Comment Letter of Joseph R. Crouse, Executive Vice President and Legislative Counsel, MBNA America Bank, N.A. 3 (Aug. 27, 1996) (encouraging raising of de minimis amount to \$500 (and subsequently indexing this amount for inflation), because the "cashlike equivalent stored-value card should not be more restrictive" than automatic teller machines, from many of which "up to \$300 in cash can be withdrawn . . . by a consumer, thereby avoiding all regulatory restrictions and disclosures related to the consumer's use or loss of the cash."); Comment Letter of Gary Lorenz, General Manager, Diebold Campus Card Division 3 (July 31, 1996) (suggesting that for on-line accountable systems the de minimis level be based on the normal value of the transactions that the card would be used for rather than the total value stored on the card.) (July 31, 1996); Comment Letter of John H. Huffstutler, Senior Vice President and Chief Regulatory Counsel, Bank of America 6 (Aug. 30, 1996) (rejecting proposed \$100 threshold as "arbitrary and inappropriate without further empirical evidence with stored-value services."); Comment Letter of Kenneth J. Bonneville, Senior Counsel, Norwest Corporation 7 (Sept. 5, 1996) (proposing that de minimis threshold amount be increased and that it be indexed for inflation.).

129. One consumer advocacy organization asked whether the \$100 limit was truly *de minimis*: "For a person who earns the \$4.25 minimum wage or close to it, \$100 is a substantial amount of money The \$100 may be *de minimis* to merchants and financial institutions, not to consumers." Comment Letter of Mark E. Budnitz, Chairman of the Board of Directors, et al., Consumer Law Center of the South, Inc. 4-5 (Aug. 27, 1996). Another advised that:

[t]he Federal Reserve Board should not permit *de minimis* exceptions Individuals holding cards with caps of \$90 should be able to count on the same protections as individuals holding cards with caps of \$110-- or \$1100. We are particularly concerned that the adverse impacts of *de minimis* exceptions would fall disproportionately on low-income cardholders, who would be most likely to purchase low balance cards.

Comment Letter of Janice C. Shields, Consumer Research Director, U.S. Public Interest Research Group 8 (Aug. 6, 1996).

130. Proposal, supra note 4, at 19,698.

transaction data are stored (including information such as merchant identification, amount, date, and card number). The balance of funds available to the consumer is not recorded on the card itself, as in off-line stored-value systems; instead, the balance information is maintained in the data facility.¹³¹

These systems would provide a different set of advantages and disadvantages to consumers. As one commentator recognized,

[o]n-line systems may be superior to off-line systems in their ability to limit consumer losses from an account that has been compromised or a card that has been lost, while off-line systems may be superior to on-line systems with respect to consumer privacy and cost of operation without telecommunications-based authorization ¹³²

The Board proposed to add to Regulation E a definition of "on-line stored-value account" as:

a balance of funds that may be accessed only through the use of a card that a consumer may use at electronic terminals to obtain cash or purchase goods or services, where the record of such balance is maintained on a separate database, and not on the card, and where on-line authorization of transactions is required to access the funds.¹³³

Although the Board found that "an on-line stored-value system is the functional equivalent of a deposit account accessed by a debit card, and thus can be viewed as representing a consumer asset account for Regulation E purposes, subject to coverage by the regulation," 134 it identified two major differences between these situations.

First, a debit card, whether used by the consumer or by an unauthorized user who has somehow obtained the appropriate personal identification number, can access the entire current value of the consumer's account. ¹³⁵ By contrast, the stored value card can be used only within access limits set by the consumer. ¹³⁶ Second, funds accessible from

^{131.} *Id.* at 19,699. It appears that at least some vending machines that accept stored value cards operate with on-line systems. Comment Letter of Dale A. Witenhafer, ICAM Regional Director, The Advisory Group, Inc., 1 (undated - received by the Board on July 30, 1996).

^{132.} Comment Letter of Robert Gilson, *supra* note 70, at 4. *See also* Comment Letter of Carl Howard, Assistant Secretary, Citicorp 7 (Sept. 6, 1996) ("off-line unaccountable' [systems] are the most 'risky'... from a consumer protection standpoint because they are the most vulnerable to counterfeiting and other types of fraud.").

^{133.} Proposed § 205.16(b)(2); Proposal, supra note 4, at 19,704.

^{134.} See Proposal, supra note 4, at 19,702. Arguably, this kind of on-line system is not technically a "stored value" system because the value is never stored on the card itself but remains in a deposit account held by the card issuer; in this respect the system's card, like a debit card, is nothing more than a token by which the user initiates the transaction, or, in fact, the anomalous "on-line unaccountable" system that had not been included in the Board's categorization scheme. See supra note 105.

In August 1996, the FDIC could still observe that "[s]o far as we are aware, [such on-line stored value card systems] are not currently being utilized by depository institutions." General Counsel's Opinion No. 8, *supra* note 7, 61 Fed. Reg. at 40,490 n.1.

^{135.} See supra note 79.

^{136.} See Proposal, supra note 4, at 16,999. The American Bankers Association suggested that to clarify that on-line accounts do not include "traditional accounts accessible only by card," the Board add

a deposit account by a debit card "typically may be accessed through various [other] means, including check [and] withdrawal slip,"¹³⁷ though funds available through an on-line stored value card will not be otherwise available to the consumer.

Because these systems appeared to the Board to meet Regulation E's definition of "account," and because information concerning the transaction is stored by the financial institution rather than by the card itself, the Board favored applying to this type of system the majority of the requirements of Regulation E. 138 However, periodic statements to the consumer would not be necessary when the card is designed to be reloadable or to be quickly exhausted and discarded; in such circumstances, the issuer could instead provide the account balance and transaction history to the cardholder upon request. 139 And, as with off-line accountable stored value systems, the Board was willing to exempt from all requirements of Regulation E on-line stored value systems in which the maximum amount that can be associated with a card at any time is \$100.140

V. COMMENTS ON PROPOSED REVISIONS

Among the comments submitted to the Board of Governors with respect to the proposed revisions of Regulation E, the most significant and frequent criticisms concerned whether the purchase and use of a stored value card actually create and affect an "account" of the customer. ¹⁴¹ Even if such accounts were deemed to be established by some types of systems, commentators questioned whether the accountable/unaccountable distinction and the on-line/off-line distinction could be effectively implemented and whether they conformed with customer expectations of stored value systems.

to its definition of on-line systems the statement that "[t]he value associated with a card is limited to the amount that the cardholder has chosen to make accessible through the card as opposed to a deposit account accessed by debit card, where the entire balance is accessible and funds available may fluctuate." Comment Letter of Nessa E. Feddis, *supra* note 12, at 9.

^{137.} Proposal, *supra* note 4, at 16,999. The Federal Deposit Insurance Corporation (FDIC) has similarly recognized that the distinction between debit cards and on-line accountable stored value cards is that with regard to the latter, "the cardholder specifically designates the amount of money that may be accessed through the card and once so designated, such funds may only be accessed through the card." FDIC General Counsel's Opinion No. 8, *supra* note 7, at 40,490 n.1.

^{138.} See Proposal, supra note 4, at 19,699.

^{139.} See id. at 19,702-703.

^{140.} See id. at 19,703.

^{141.} Reflecting but not resolving this ambiguity, the American Bar Association Task Force on Stored Value Cards observed in passing that "[m]uch attention has also been devoted to considering whether the 'due to' account on the issuer's books constitutes a deposit account." Commercial Lawyer, supra note 12, at 676. Instead, the Task Force used the term "monetary obligation" to refer to "the debt that a party is trying to extinguish by tendering the intangible right stored on the new payment product. From a legal perspective, it is not useful and perhaps misleading to characterize the tender of an obligation as an offer to transfer money." Id. at 677.

A. Criticism of Board's Treatment of "Account"

1. No Segregation of Funds

Observing that financial institutions would not segregate by customer the funds submitted to purchase or to reload value on stored value cards, several commentators on the Board's proposal asserted that these funds therefore did not constitute "accounts" within the scope of the EFTA or of Regulation E.

For example, First Union Corporation announced that it:

will not maintain a record of the individuals purchasing stored value cards, of the individuals loading or reloading the cards, of the 'owners' of the cards or the values associated with the cards, or the balance remaining on any particular card. In essence, the bank will be maintaining an unsegregated pool available to meet obligations arising from use or redemption of the card. ¹⁴²

Nor would this bank segregate the funds with regard to merchants or acquiring banks that would be receiving them.¹⁴³ Indeed, under the institution's arrangement with Visa, the disclosures accompanying the Visa Cash stored value card state that the card is the equivalent of cash and will not be replaced if lost or stolen, and that the card does not constitute an account or deposit with the bank.¹⁴⁴

Similarly, argued the bank, an "account" relationship would not be established unless each card "is at least identifiable with a particular and locatable individual." Because stored value cards can be purchased anonymously and can be transferred among users, they would "in essence operate" not as account-related access devices but as "coupon book[s] that can identify when, how much, and where each coupon would was used." 146

The industry consortium, The Smart Card Forum, likewise found that closed stored value systems, i.e., those "created by a merchant for the purchases of goods and

[a]fter the card is used at a merchant, the merchant through its acquiring bank transmits information to VISA, which in turn is transmitted to the issuing bank. The issuing bank will make payments through VISA to the acquiring bank, as to those cards issued by the bank, who in turn will credit the respective merchant.

Letter of L. Wayne Sams, supra note 50, at 5.

144. Id. at 8. See also Comment Letter of Brian L. McDonnell, President, Navy Federal Credit Union 2-3 (Aug. 23, 1996) (since consumer's value on off-line stored value card resides on the card itself, independent of any repository account that may be used to effect settlement with merchants, no "account" has been created within the meaning of Regulation E.)

145. Comment Letter of Nessa E. Feddis, supra note 12, at 8.

146. *Id.* Because it found that "most stored value cards are not 'accounts,' as that term is generally understood," the American Bankers Association recommended that "the Board make clear that [Regulation E] does not apply to stored value cards, whether or not they are 'accountable' or 'unaccountable,' or 'online' or 'off-line." *Id.* at 5.

^{142.} Comment Letter of L. Wayne Sams, *supra* note 50, at 7 (Aug. 29,1996). Similarly, the Board's distinction between "accountable" and "unaccountable" has been attacked as not signifying an account relationship, since the value stored in either type of card "may merely represent claims against an insurer, depending upon how the funds are held by the issuer." Comment Letter of James A. Pihera, *supra* note 71.

^{143.} Indeed,

services sold solely by the merchant," are not covered by the EFTA's defintion of "account" and in fact "are little more than high-technology gift certificate or prepaid purchase programs" which are not within the scope of Regulation E.¹⁴⁷ The American Bankers Association agreed that "if the issuer is the sole vendor accepting the card, the regulation should exempt the system," since it would generally involve lower amounts and would not resemble a local payment system.¹⁴⁸

2. No Ownership Interest in Bank's Obligation

The coupon analogy was adopted in a different context by another commentator. MasterCard Corporation argued that even if the issuing institution were to maintain a record of transactions involving specific stored value cards through a "master settlement account," "the individual holder of the stored-value card has no ownership interest in the master settlement account, [but] only in the value of the card." In this view, the purchase of a stored value card for money is "more properly viewed as an exchange of value from one form to another, rather than as the opening and maintenance of an account with a financial institution." Thus the comparable situation would be that of the individual's converting value from one form to another by "exchang[ing] cash or value from a deposit account or a credit account for . . . some other non-deposit good or service, such as toll bridge tickets, parking scrip or dining coupons." 150

Norwest Corporation found it more appropriate to compare the bank's obligations on stored value cards to those of a bank on "teller's checks, cashier's checks, certified checks, and bank money orders which are also [transferable] direct obligations of a bank to a third party that are not 'accounts'" under Regulation E. 151 The Huntington National Bank had also asserted that

[w]ith off-line cards there is only an account in the sense [that] there is an account represented by a traveler's check or cashier's check that the consumer purchases, and it seems unlikely that anyone would suggest that the consumer's 'interest' in a pooled account in which funds are held to pay a cashier's check issued to the consumer 'strongly parallels the functioning of a deposit account.' 152

^{147.} Comment Letter of Robert Gilson, supra note 70, at 8.

^{148.} Comment Letter of Nessa E. Feddis, supra note 12, at 9-10.

^{149.} Comment Letter of Noah J. Hanft, Senior Vice President/U.S. Region Counsel & Assistant General Counsel, MasterCard International 7 (Sept. 6, 1996).

^{150.} Id.

^{151.} Comment Letter of Kenneth J. Bonneville, *supra* note 128, at 4. Thus, [w]hen a customer debits his or her account and 'loads' his stored-value card, the consumer is not transferring money from one account to another. Rather, the consumer is debiting his or her account, purchasing bank credit in the form of electronic money and recording the purchased bank credit on the stored-value card.

Id. at 4-5. See also Remarks of Edgar Brown, Senior Vice President of First Union Corporation, FDIC Hearing, supra note 12, at 32 (Sept. 12, 1996):

[[]T]here is no intent or expectation on the part of the bank or the customer to create a deposit relationship when a stored value card is purchased. The expectation in fact is to purchase a means by which transactions may be made in a manner which is similar to but more convenient than cash.

Id.

3. Extension, Location, and Relevance of Transactional Records

In arguing that stored value cards were not associated with "accounts," financial institutions cited the treatment and location not just of the consumer's funds but also of the relevant transactional records. As one commentator observed, the "account" corresponding to an off-line accountable card "would appear to include the 'pipeline' of settlement transactions [that are to be reconciled between the balance stored on the card and the balance recorded in the off-line account] along with the separate balances." ¹⁵³

This attentuation, noted another commentator, calls into question the Board's conclusion that "systems which track transactions using the stored value account, even if the tracking occurs on a delayed (as opposed to real time) basis, involve access to a consumer account," 154 since the Board thereby

stretches the concept of consumer account to include not just accounting records which constitute primary evidence of the asset, and over which the financial institution exercises control, but also those which perform only a historical function and are not, legally, evidence of the issuer's obligation or the value contained on the storage device. 155

Sams, supra note 50, at 12 (comparing stored value card to travelers' check because both can be returned to the issuer for redemption; but noting that "most travelers' check systems will provide greater protections for the purchaser than stored value card systems; the purchaser of a travelers' check can return to the issuer for a refund if the check is lost or stolen, the travelers' check creates a paper trail, and a signature and identification are required for cashing. The issuer has the ability to determine the actual usage of the checks, and can refund or replace the checks in appropriate instances.") Cf. FDIC Comment Letter of Jill M. Considine, supra note 39, at 6 (finding analogies of stored value cards to letters of credit, money orders, and cashier's checks "only tangentially relevant" with regard to the question of whether the funds held by financial institutions for stored value card obligations qualify for depository insurance); FDIC Comment Letter of Robert J. Davis, Director, Government Relations, America's Community Bankers 3 (Oct. 31, 1996) (asserting, in the same context, that "stored value cards do not meet the conditions of negotiable instrument status and, therefore, no further distinctions or analogies to cashiers' checks or money orders are necessary."); FDIC Comment Letter of Leland M. Stenehjem, Jr., President, Independent Bankers Association of America 5 (Oct. 30, 1996) (in situations involving a letter of credit or a cashier's check, "the recipient of the funds can be identified at the time the letter or check is purchased and funds are set aside to cover the transaction. The same cannot be said with stored value cards, where the ultimate payee is unknown and may not even be identifiable.").

- 153. Comment Letter of Brian L. McDonnell, supra note 144, at 2-3.
- 154. Comment Letter of R. David Whitaker, *supra* note 109, at 2 (distinguishing between access by stored value product to traditional asset account for purposes of downloading value, which transaction should fall within the scope of the EFTA, and transactions "initiated from the stored value account itself," which would not be within statute's scope). *Cf.* Comment Letter of Noah J. Hanft, *supra* note 149, at 6 n.2 (although Regulation E would certainly apply to consumer's loading stored value card from consumer's deposit account, "most stored-value card programs do not access a consumer asset account at a financial institution when using the stored-value feature on the card to make individual purchases or engage in other stored-value transactions.").
- 155. Comment Letter of R. David Whitaker, *supra* note 109, at 2-3. Mr. Whitaker also suggested that the proposed revisions to Regulation E be amended to clarify whether the "balance information" whose tracking would render a stored value product accountable referred to the amount of value loaded

Moreover, one could argue that "because the primary evidence of [such accounts] is not held by a financial institution, EFTA does not apply." 156

4. No Consumer Expectation of Account

Somewhat ironically in light of the complicated analogies that they had advanced in arguing that no "account" was associated with a stored value card under Regulation E, several financial institutions insisted that the consumer buying a stored value card intuitively realized that she had not thereby established an account at her bank. One bank maintained that "[t]he consumer generally understands that the funds represented by the card would be lost if the card is lost, just as if it were cash. Therefore, in most cases, no account relationship has been created." Another argued that, with regard to off-line cards, "[t]he consumer does not expect to be able to go into the bank and withdraw the money, nor would he or she be able to do so." The consumer could, however, be expected to distinguish the off-line operation of stored value cards from "the way the consumer typically uses his or her debit card in an on-line mode," rendering the off-line cards less likely to generate "the kind of confusion that could arise with on-line stored value cards."

In fact, the American Bar Association Task Force on Stored Value Cards has predicted that "[b]ased on the expectations of the parties . . . a court would most likely fashion a rule such as that governing cashier's checks to address discharge absent an enforceable contract provision." The Task Force's report also concluded that if the issuers of such cards, like those of credit and debit cards, themselves provided "a clear set of rules governing finality and discharge[,] . . . such a contract provision would be upheld so long as the provision is clearly disclosed to the users of the product." ¹⁶¹

onto the card, the amount of loaded value used, or a combination of these. Id. at 4-5.

^{156.} *Id.* at 3. Under this interpretation, the consumer would still be protected by the EFTA in the downloading of funds from a traditional bank account, which is covered by the EFTA, *see supra* note 103, onto the stored value card. *Id.*

^{157.} Attachment to Comment Letter of James A. Pihera, *supra* note 71 at 5. *Cf.* Comment Letter of L. Wayne Sams, *supra* note 50, at 1 (asserting that "the relationship among the participants in a stored value card system is best characterized as a voluntary contractual payment system, and unless the parties contractually intend to create an account for the consumer, none should be presumed.").

^{158.} Comment Letter of Daniel W. Morton, supra note 81, at 8-9.

^{159.} Id. (characterizing on-line stored value cards as actually being "special purpose debit cards.").

^{160.} Commercial Lawyer, supra note 12, at 699. See also Henry H. Perritt, Jr., Legal and Technological Infrastructures for Electronic Payment Systems, 22 RUTGERS COMPUTER & TECH. L.J. 1 (1996) [hereinafter Infrastructures] (analyzing extent to which legal model of credit card transactions can be applied to transactions involving electronic cash); Id. at 20 ("Much existing payment law pertinent to the National Information Infrastructure (NII) is private law: a web of contracts usually derived from master contract language written by banking and credit card associations."). Cf. Cash is Dying, supra note 26, at 42 (credit card companies "have . . . come to serve, day in and day out, as a sort of shadow judicial system" in hearing and resolving consumer complaints against merchants.).

^{161.} Commercial Lawyer, supra note 12, at 700.

B. Criticism of the Accountable/Unaccountable Distinction

1. Operational Difficulties

Apart from claiming that the purchase and use of stored value cards does not establish or affect an "account" within the meaning of Regulation E, the financial community contended that, even if such an account were thus created, the accountable/unaccountable distinction was untenable in practice. Noted one bank,

[t]his difference does not seem to be one that is easy to maintain, particularly since there is likely to be significant variation from one institution to another, with many shades of difference, with respect to where the record of value is maintained and when and how the record of value and transaction data are kept and transmitted to the central data facility. 162

Others argued that "some systems that are 'off-line unaccountable' [but] nevertheless have the technical ability to create in a central database a record of substantially all transactions that occur" should not be deemed off-line accountable unless that database is actually created. 163 Problems involving the hybrid or potential

See also Comment Letter of Dudley M. Nigg, supra note 109, at 3 (observing that in some "off-line" systems a record of transactions is technically but not efficiently recoverable). Mr. Nigg proposed that "the distinction between the two types of 'off-line' systems is better drawn by alluding to the system's ability to track transactions occurring within the system rather than to the maintenance of separate databases," and thus that "off-line accountable" systems "should be defined to include those in which all transactions are trackable" by the participating financial institutions." Id. at 4.

Other commentators disagreed that:

treatment should not vary based upon the ability or the need to track usage or balance for a particular card. In the VISA Cash model, the issuing banks will have the ability to track balances on a particular card, but will not do so on a routine basis for reasons of cost, computing capacity and lack of usefulness of the information. The ability to perform such accounting functions for a particular card should not be confused with the establishment of an account for the benefit of the purchaser. For those systems that intend to create an account for the benefit of the customer and perform the related tracking and monitoring services, such intent would certainly be indicated to the customer. For those institutions that do not intend to create such an account, so long as this lack of intent is disclosed, no account should be deemed to exist simply because the institution might have the ability to reconstruct usage of or the value remaining on a card.

Comment Letter of L. Wayne Sams, *supra* note 50, at 11. *See also* Comment Letter of Carl Howard, *supra* note 132, at 7 n.2 (recommending that Board clarify that a stored value system "would be 'unaccountable' even if the issuer possesses sufficient information on one or more databases to permit the issuer to construct a record of each customer's [stored value] balance, as long as the issuer does not in fact construct such a record.").

^{162.} Comment Letter of Daniel W. Morton, supra note 81, at 8.

^{163.} Comment Letter of Jill M. Considine, President, New York Clearing House 4 (Sept. 6, 1996). However, in light of the burgeoning concerns about privacy in Internet-related transactions, one might question whether, as Ms. Considine suggests, "[u]sers of stored-value cards are largely indifferent to whether or not the database exists." *Id. See, e.g.*, Steven Levy, *E-Money (That's What I Want)*, WIRED 174 (Dec. 1994) (discussing importance to consumer of anonymity and privacy in context of digital transactions).

nature of stored value systems will only proliferate as the market for these products matures. 164

Indeed, the proposed regulatory language itself does not fully convey the sense of the Board's explanatory language concerning the distinction between accountable and unaccountable systems. Asked one industry group, "if account balance data is always current on the card but is also updated periodically at a central site through batch transmissions of merchant data, is this an 'accountable' or 'unaccountable' off-line system?" 166

2. Divergence from Consumer Expectations

Echoing their argument that consumers paying for a stored value card do not expect an "account" to be created, financial institutions insisted that "consumers will not perceive any difference between [accountable and unaccountable systems]. If the funds are pulled out of a consumer's account when he or she loads or purchases the card, the consumer will not view those funds as being in his or her deposit account." In this context, to the degree that the Board's distinctions

are based upon system design and not on system function or risk to the end user[, w]e believe that the design differences between the three types of systems currently being evaluated are transparent to consumers and will confuse them. Adoption of the current proposal would result in systems that are functionally identical in the consumer's view having different regulatory treatment.¹⁶⁸

164. Comment Letter of Robert J. Egan, Vice President and Assistant General Counsel, The Chase Manhattan Bank 3 (Sept. 5, 1996) (observing that the Federal Reserve Board's "categories are based in large measure on conjecture about the way in which products will operate—products which are still only at the proposal or pilot stage"). Mr. Egan noted:

[e]ven at this time however, there are products which do not fit easily within the categories that the Board has put forward. There are off-line unaccountable products which in certain circumstances may go on-line as those products['] developers seek to determine whether such a feature can provide security features and other protections which consumers may find desirable. There are also off-line accountable products which store only a portion of total transaction data. Until the content of products is better understood by the market place, and such products become more standardized in their presentation, any regulation may significantly stifle development while not contributing to consumer protection.

Id.

165. Comment Letter of Robert Gilson, *supra* note 70, at 9 (Aug. 26, 1996) (citing proposed 205.16(b)(1) as failing to convey "that an off-line stored value systems is 'accountable' rather than 'unaccountable' if the merchant terminals maintain transaction data longer than 'a limited period of time' or if the merchant transmits transaction activity data by individual card numbers as well as in the aggregate.").

166. Id. (advising the Board to "clarify how data 'location' is to be measured").

167. Comment Letter of James A. Pihera, *supra* note 71, at 5 (adding, that "treating 'unaccountable' and 'accountable' systems differently... is contrary to the legislative history quoted by the Board in its proposal, which provides that persons offering similar EFT services should be subject to the same standards and consumers receiving similar services should be subject to the same protections.").

168. Comment Letter of John H. Huffstutler, *supra* note 128, at 5. Mr. Huffstutler suggested that: given the infancy of many stored-value services, . . . the Board . . . require [as "the only provision of Regulation E that should be applied to stored-value services at this time"] an initial written or electronic disclosure for all stored-value services so that the consumer is

C. Criticism of the On-line/Off-line Distinction

1. Operational Difficulties

Just as commentators raised concerns about the legal, operational, and technological viability of the accountable/unaccountable distinction, so did they observe that the difference between on-line and off-line systems is "very technology dependent," often difficult to discern, ¹⁶⁹ and subject to being destroyed by technological developments, ¹⁷⁰ including the ultimate implementation of "real time, on-line operation of systems." ¹⁷¹ In fact, although the difference between the two types of systems is whether or not transaction data are stored and retained only in a location separate from the card itself, the Board's proposal was faulted for not including these criteria in the suggested definitions. ¹⁷²

aware of the terms and conditions of the particular stored-value service being used, such as who bears the risk of loss or any fees that may be associated with the services.

Id. at 6. Indeed, if the only difference is recordkeeping but "the systems [do not] choose to implement the technologies differently" and they provide "consumer comparable rights and remedies related to the use of the cards," there will be no difference between such systems from a consumer's perspective. Comment Letter of Marcia E. Heister, supra note 23, at 2 ("From the consumer's perspective, the distinction [between these systems] is not meaningful unless the systems choose to implement the technologies differently."). See also Comment Letter of Broox W. Peterson, Senior Vice President and Assistant General Counsel, Visa International 9 (Sept. 5, 1996) (off-line unaccountable and off-line accountable systems are equally able to provide disclosures required under the Proposal to consumers; "whether an off-line stored value card system is accountable or unaccountable is not readily apparent to the consumer. The consumer should not be expected to care, or indeed even know, whether a particular off-line stored value card system is accountable or unaccountable ").

169. Comment Letter of Daniel W. Morton, supra note 81, at 11.

170. See, e.g., Comment Letter of Carl V. Howard, supra note 132, at 3. Future systems might, for example, utilize "on-line" authentication schemes to authenticate a storage device (such as a smart card) but not transmit any transactional data (such as the amount being deducted from the smart card)... Deferring regulation would give the Board time to craft simpler rules that would conform better to these new products.

Id. Such a system would appear to be the anomalous "on-line unaccountable" system, discussed supra at notes 105 and 134. See also Comment Letter of Noah J. Hanft, supra note 149, at 9.

[F]or security or other operational reasons, the system may cause certain transactions to occur on-line, where a host computer can revalidate the card for continued use or terminate further use if, for example, counterfeit value is suspected [S]uch systems should still be viewed as off-line systems since the value utilized to complete the transaction is on the card itself and not in an account (either debit or credit) at the financial institution.

Id.

171. Statement of Diane M. Casey, Partner and National Director of Financial Services, Grant Thornton LLP, at FDIC Hearing, *supra* note 12, at 23 (Sept. 12, 1996) ("The significance of a distinction between on-line and off-line deposits may also be transitory. Although banking systems have lagged the trend, [t]he convergence of telecommunications and computing power may eventually enable a significant majority of payment transactions to occur on-line.").

172. Comment Letter of Daniel W. Morton, supra note 81, at 11. See also Comment Letter of Brian L. McDonnell, supra note 144, at 2.

Moreover, if the definitions were to cover systems by which stored value balances could be transferred from one person's card to another, "[u]nder the Board's definition, an off-line stored value "account" would encompass multiple cards, multiple balances and multiple transaction accounts at dispersed, off-line locations, spanning unspecified periods of time. Such a definition would likely cause considerable confusion and inconsistency throughout the financial services industry." ¹⁷³

2. Divergence from Consumer Expectations

The on-line/off-line distinction was also attacked as not being

discernible to consumers. A consumer is not likely to know whether a stored-value card transaction is authorized in real time from a remote, decentralized database. Moreover, technological distinctions that *are* meaningful to consumers (e.g., whether PIN access is required, whether the account is "reloadable") will be found in both off-line and on-line stored-value systems.¹⁷⁴

To allay this confusion, commentators recommended that the on-line/off-line distinction instead be

based on whether the card must always be authorized from a data base separate from the card itself or the merchant terminal before the transaction can proceed. By requiring an on-line card to be one that is always authorized, cards that can be used in both an off-line and on-line mode would be off-line cards.¹⁷⁵

[T]he proposed definition of off-line stored value account (which would be subject to EFTA) does not make . . . a distinction [concerning "whether the individual stored value card transactions are captured on a separate database"] and would include some portion of those systems that are not referred to as off-line accountable systems in the supplementary information.

Id. In fact, "[t]he location of balance information is inconsequential to distinguishing the on-line stored value account from other stored value systems," since, "[f]or example, the off-line accountable system may also maintain a balance on a separate database."). Id.

173. Comment Letter of Brian L. McDonnell, *supra* note 144, at 2-3 (observing that such a system is "currently in the pilot stage").

174. *Id.* at 4-5. *See also* Comment Letter of David C. Fynn, Senior Vice President, National City Corporation 1 (Sept. 5, 1996), deeming the distinction "inadequate" because

[a]n on-line system may be anonymous, may not be PIN protected, may be only acceptable for goods and services at POS, and may not be accepted at ATM's, and therefore may not look at all like a debit card. Certain on-line stored value cards may therefore look and act more like off-line stored value systems than like a debit card system and should be categorized with off-line systems.

Id.

175. Id. See also Comment Letter of Nessa E. Feddis, supra note 12, at 9 (suggesting that the Board define a stored value account as, in relevant part, "an account where... the balance of funds is accessed only through the use of a card that a consumer may use at electronic terminals to obtain cash or purchase goods or services....") (emphasis added).

3. Incentive for Designers to Favor Off-line Systems

The suggestion was also made that because the Board was prepared to apply more of the requirements of Regulation E to on-line systems than to off-line systems, a designer of systems that would otherwise qualify as on-line systems would have an incentive to "remove itself from Regulation E coverage simply by maintaining a record of the balance on both the card and the separate database or by eliminating the need for on-line authorization of each transaction." To one commentator, the elimination of the distinction between on-line and off-line systems would remove this "artificial incentive."

VI. THE FDIC GENERAL COUNSEL'S OPINION NO. 8

The classifications created by the Board for the application of Regulation E, and the criticisms that they engendered, were cast in a new light by the categorizations of stored value card systems adopted by the Federal Deposit Insurance Corporation ("FDIC") for evaluating the insurability of the funds held by the card issuers. Although the Board's distinctions among stored value systems had generally involved the locations of the ability to authorize a transaction and of the records of a card's balance, the FDIC's inquiry focused on where the value or funds themselves resided.

Curiously, one comment on the Board's proposal found these "highly dissimilar approaches to the governance of an emerging industry" evidence of "difficulties associated with premature conceptualizations of industry activities that have not sufficiently developed to justify highly structured or intensive regulatory actions." Not only does this comment fail to provide any test to determine when such regulations would be justified, but there is no guarantee that, whenever that point is reached,

Id.

178. Comment Letter of Brian L. McDonnell, *supra* note 144, at 4. *Cf.* FDIC Comment Letter of Jane R. Stafford, Deputy General Counsel and Senior Corporate Compliance Officer, Central Fidelity National Bank 1 (Oct. 30, 1996) ("if the FDIC and the Federal Reserve decide the issues of deposit insurance, and electronic funds liabilities before the legal status of the stored value card has been decided [by statute or legislation], the decisions made by the FDIC may ultimately 'force' the legal interpretations which will create the 'law of stored value cards'" and lead to inherent unpredictability for banks).

^{176.} Comment Letter of Kenneth J. Bonneville, *supra* note 128, at 7, adding that [i]n either instance, it is difficult to discern a public policy basis for applying the extensive coverage of Regulation E to systems that fall within the scope of the definition of an on-line stored-value account and completely excluding substantially similar stored value systems that, in some instances, provide less consumer protection.

Id. See also Comment Letter of Nessa E. Feddis, *supra* note 12, at 5 (predicting that "the potential for more restrictive burdens will inappropriately influence product architectures."). This group recommended that "the regulation should not treat differently cards that function the same, but happen to use a different technology." *Id.* at 8.

^{177.} Comment Letter of Carl V. Howard, *supra* note 132, at 6. *See also* Comment Letter of Broox W. Peterson, *supra* note 168, at 11 stating:

any Regulation E distinction between off-line accountable and unaccountable stored value card systems would provide issuers an incentive to design their off-line stored value card system in order to obtain the preferred Regulation E treatment (i.e., as an off-line unaccountable stored value card system). This artificial incentive would distort the operation of market forces, and result in economic and other inefficiencies.

technological evolution will have made the regulators' tasks easier or more convergent. Indeed, "highly structured or intensive regulatory actions" taken by different agencies might even be more likely to diverge in their approaches.

A. FDIC Classification of Stored Value Systems

In its "General Counsel's Opinion No. 8; Stored Value Cards and Other Electronic Payment Systems," 179 the FDIC addressed "whether and to what extent the funds or obligations underlying stored value cards constitute 'deposits' within the meaning of section 3(1) of the Federal Deposit Insurance Act (FDIA) and are therefore assessable and qualify for deposit insurance." 180

The FDIC abandoned the on-line/off-line and accountable/unaccountable distinctions that the Federal Reserve Board of Governors had employed in the Board's proposed revisions to Regulation E.

This is not intended as a criticism or rejection of the Board's classification system. Rather, it is indicative of the fact that these particular distinctions are not necessarily germane as to whether and under what circumstances the funds underlying a stored value card are 'deposits' under the Federal Deposit Insurance Act (FDIA).¹⁸¹

In characterizing the qualifications of different types of stored value card systems for deposit insurance coverage, a status that the FDIC "would expect that institutions clearly and conspicuously disclose to their customers . . . as appropriate," ¹⁸² the FDIC separated stored value cards into three classes, each of which fitted differently into the following three statutory requirements for depository insurance:

the funds must represent:

- (1) an unpaid balance of money or its equivalent received or held by an institution;
- (2) in the usual course of business¹⁸³; and

^{179. 61} Fed. Reg. 40,490 (Aug. 2, 1996).

^{180.} Id. at 40,491.

^{181.} *Id.* at 40,490 n.1. The FDIC warned that its own set of classifications was "not intended to encompass all of the possible ways that stored value card systems may be structured [but] represents a mechanism to generalize the circumstances under which the funds underlying stored value cards may or may not be considered deposits within the meaning of the [Federal Deposit Insurance Act]." *Id.* at 40,490 n.3.

Yet the FDIC's approach was not without its adherents among the regulated community. See, e.g., Comment Letter of Robert Gilson, supra note 70, at 4-5 stating

the categories proposed by the F.D.I.C.... appear to be more relevant [than those of the Board] to a determination of whether an account relationship exists between the consumer and the financial institution. Those classifications focus more on how the funds represented by the stored value card are held by the financial institution in relation to the customer, rather than the method of performing a transaction.

Id. See also Comment Letter of L. Wayne Sams, supra note 50, at 8-9 (urging the Federal Reserve Board to follow FDIC's conclusion that because of "the intent of the parties and the inability to tie the funds to any individual" no account relationship was established by a stored value card arrangement).

^{182. 61} Fed. Reg. at 40,494 (Aug. 2 1996).

^{183.} The FDIC would be likely to see this requirement as satisfied for all of the types of systems considered by it, because "insured depository institutions are increasingly participating in stored value card

(3) either

(a) the institution must have given or be obligated to give credit to a commercial checking, savings, time, or thrift account; or (b) the funds must be held for a special or specific purpose. 184

1. Bank Primary - Customer Account Systems

The funds corresponding to the value stored on cards that belong to this type of system "could remain in a customer's account until the value is transferred to a merchant or third party, who in turn collects the funds from the customer's bank." Customers' funds in these systems would qualify for federal deposit insurance as "deposits" under the Federal Deposit Insurance Act. 186

This type of system would appear to correspond to the Board's "on-line accountable" cards, to the extent that those cards operated as debit cards that did not store value but initiated and requested authorization for its transfer from funds held in the consumer's name by a financial institution.¹⁸⁷ In both off-line accountable and off-line unaccountable systems, the value is stored on the card itself and the funds paid to purchase the card may be held in an unsegregated account or pool.

2. Bank Primary - Reserve Systems

In this type of system, "as value is downloaded onto a card, funds are withdrawn from a customer's account (or paid directly by the customer) and paid into a reserve or general liability account held at the institution to pay merchants and other payees as they make claims for payment." Unless such a system is "truly closed" to the extent that "the ultimate payee can only be one pre-determined specific party," funds in these

systems," thus making it part of their "usual course of business." Id. at 40,492.

^{184.} Id. at 40,491 (synthesizing the requirements of 12 U.S.C. § 1813(I)(1) and (3) (1994), relevant parts of the Federal Deposit Insurance Act's definition of "deposit").

^{185.} Id. at 40,490.

^{186.} Requirement (1) above would be satisfied because "the institution will hold the funds to pay merchants and other payees." 61 Fed. Reg. at 40,491. Requirement (3)(a) would be satisfied because "the funds remain credited to the customer's account until claims on such funds are made by payees." *Id.* at 40,492. However, Requirement (3)(b) would not be satisfied because "an institution holding funds to meet obligations to transferees in a Bank Primary - Reserve System does not appear to be as specific a purpose as the examples in the statute and in the cases finding deposit liabilities under section 3(1)(3) of the FDIA." *Id.* at 40,493.

^{187.} The FDIC acknowledged that a Bank Primary - Customer Account System "would be similar to debit card systems, except that, unlike a debit card the information or value is on the card itself. The staff is not aware of any such system currently in development. It is our understanding, however, that such a system could be developed." *Id.* at 40,490 n.4. *See also* FDIC Comment Letter of Michael E. Bleier, General Counsel, Mellon Bank 2 (Oct. 31, 1996), which views stored value cards in such systems as:

a form of debit card, distinguished primarily by the batch processing of the card transactions rather [than] the transaction-by-transaction processing associated with other debit card types. Bank Primary Advance Cards are hardly stored value cards at all. They are more akin to a debit card with an electronically built-in payment limit and their value should be subject to FDIC insurance just as balances in bank accounts accessible by a debit card would be.

systems will not qualify for federal deposit insurance because they do not meet Requirement (3)(a) or (3)(b). 189

One financial institution, in responding to the Federal Reserve Board's proposed revisions to Regulation E, characterized its own stored value card system as a "Bank Primary - Reserve System" because "the funds received by the bank are not maintained in an account of the customer, but rather [are put] into a reserve or general liability account of the issuer." It recommended that the Federal Reserve Board follow the FDIC's lead in considering "[i]ssues such as the intent of the parties and the inability to tie the funds to any individual" in concluding whether an account relationship is established sufficient to invoke Regulation E. [9]

Generally, it would seem that to the extent that funds corresponding to value stored on off-line unaccountable and off-line accountable cards are held in unsegregated accounts by banks, they would be considered by the FDIC to be held in "Bank Primary - Reserve" systems and thus be uninsured. 192

189. Id. at 40,493 n.11. In Bank Primary Reserve Systems, Requirement (1) would be satisfied because, as in Bank Primary - Customer Account Systems, "the institution will hold the funds to pay merchants and other payees." Id. at 40,491. However, Requirement (3)(a) would not be satisfied because when a customer purchases a stored value card in this type of system

funds are withdrawn from the customer's account (or paid directly by the customer) and paid into a reserve or general liability account maintained by the institution. Such accounts are routinely created and maintained by insured depository institutions. The FDIC does not consider such reserve or general liability accounts to be "deposits" within the meaning of [this Requirement], because there does not appear to be an obligation to credit the funds to a commercial, checking, savings, time, or thrift account. In addition, the sample agreements which the FDIC staff has reviewed clearly indicate that the parties to a stored value agreement, i.e., the insured depository institution and the purchaser of the card, do not intend that the funds be credited to one of the five enumerated accounts.

Id. at 40,492.

Nor is Requirement (3)(b) generally satisfied. In such a system:

funds appeared to be held by an institution to meet its obligations to payees as they make claims on such funds pursuant to general or miscellaneous and unrelated transactions undertaken within the stored value card system. It is my opinion that this purpose is fundamentally different from the examples listed in [this Requirement in the FDIA and the funds] are not held for a special or specific purpose within the meaning of [that section].

Id. at 40,493. However, Requirement (3)(b) could be met if the system is a truly closed system, see supra note 35. "For example, if an institution were to issue a stored value card solely for the purchase of long-distance telephone services from a specific company, such funds could be considered to be held for a special or specific purpose." 61 Fed. Reg. at 40,493 n.11.

- 190. Comment Letter of L. Wayne Sams, supra note 50, at 7-8.
- 191. Id.
- 192. See Section VI.A.1, supra. But see FDIC Comment Letter of Robert J. Davis, Director, Government Relations, America's Community Bankers, supra note 152, at 2, describing one existing system

that has some feature[s] of both a Bank Primary - Reserve System and a Bank Secondary system [because, as in a] Bank Secondary System . . . , in this arrangement the third party purchases stored value cards produced by the institution at the face amount of the cash stored on the cards. Then, like in a Bank Primary - Reserve System, the funds at the institution are held in a general liability account to later pay the claims of merchants when the cardholder uses the card.

3. Bank Secondary Systems

In this type of system, "the electronic value is created by a third party and the funds underlying the electronic value are ultimately held by such third party.... In such systems, depository institutions act as intermediaries in collecting funds from customers in exchange for electronic value." ¹⁹³

There are two subtypes of Bank Secondary Systems. In "Bank Secondary - Advance Systems," "the electronic value is provided to the institution to have available for its customers. As customers exchange funds for electronic value, the funds are held for a short period of time and then forwarded to the third party." Funds held by such an institution for a time period prior to transfer to a third party would qualify for deposit insurance until the time of transfer. 195

In the other subtype, "Bank Secondary - Pre-Acquisition Systems," "the depository institution will exchange its own funds for electronic value from the third party and in turn exchange electronic value for funds with its customers." These funds would not qualify for depository insurance because Requirement (1) would not be satisfied. 197

B. Comments on the Opinion

In a notice¹⁹⁸ published in the Federal Register immediately following its General Counsel's Opinion No. 8, the FDIC opened a 90-day comment period on the subjects covered by that document in general, with comments due on or before October 31,

^{193. 61} Fed. Reg. 40,490 (Aug. 2, 1996).

^{194.} Id.

^{195.} The FDIC's General Counsel found Requirement (1) satisfied by Bank Secondary - Advance Systems because during the period that the funds are held by the financial institution they are analogous to funds held by an institution from the proceeds of its sale of travelers' checks issued by others, which proceeds "the FDIC staff has long held... are deposits while held by the institution." *Id.* at 40,491. Requirement (3)(a) would generally not be satisfied, because "the funds which consumers pay to load value onto a stored value card are ultimately held by the third party originator of the stored value [and] no commercial, checking, savings, time or thrift account has been credited nor is the institution obligated to credit such an account." *Id.* at 40,492. However, Requirement (3)(b) might be satisfied, because "the funds being held or received in order to pay the third party may be considered held or received for a special or specific purpose within the meaning of ... the FDIA." *Id.* at 40,493.

^{196. 61} Fed. Reg. 40,490 (Aug. 2, 1996).

^{197. &}quot;Because the funds underlying the stored value are held by the third party, in my view, such funds are received or held by the third party, not the depository institution. Consequently, it appears that the requirement of 'an unpaid balance of money or its equivalent received or held by [an institution]' would not be satisfied" in these systems. *Id.* at 40,491.

^{198.} Id. at 40,294.

1996.¹⁹⁹ A public hearing, consisting of four separate panel discussions, was held on September 12, 1996.²⁰⁰

The FDIC's solicitation of comments elicited twenty responses, which generally opposed regulating stored value cards. Typical was the comment of the Bankers Roundtable, which argued that "regulatory decisions could inadvertently favor one vendor over another . . . during this embryonic period," that depository institutions might be disadvantaged by regulation that did not affect their "non-regulated high-tech competitors," and that "regulators need to coordinate among themselves lest there be inconsistent regulatory regimes that create regulatory burden and confusion." One bank urged that the FDIC wait "to see what happens with large dollar open systems before [reconsidering] whether or not to provide insurance coverage."

199. Id. at 40,497. The subjects covered included: (1) are there other stored value systems or technologies of which the staff may not be aware?; (2) whether funds held by an institution to meet obligations underlying stored value cards should be distinguished from, or analogized to, funds held to meet letters of credit; (3) whether stored value cards should be distinguished from, or analogized to, money orders or cashiers' checks drawn on an institution; (4) the expectations of consumers with regard to whether such products are FDIC-insured, and the extent to which policy should be based on such expectations; (5) whether the FDIC should distinguish between reloadable and disposable stored value cards or between single function and multiple function cards in determining whether to promulgate a regulation; (6) whether the projected low dollar denominations for stored value cards should be considered by the FDIC in determining whether to promulgate a regulation; (7) what types of disclosure would strike an appropriate balance between informing consumers and not overburdening depository institutions; (8) whether, if the funds were deposits, depository institutions would be placed at a disadvantage with respect to other issuers of stored value products; (9) whether the FDIC should ask Congress to amend section 3(1) of the FDIA to either include or exempt stored value cards from the definition of deposit; and (10) to identify the safety and soundness concerns raised by the development of stored value cards and other electronic payment systems.

200. Id. at 40,494.

201. FDIC Comment Letter of Richard M. Whiting, Senior Director for Regulatory Affairs and General Counsel, The Bankers Roundtable 2 (Oct. 23, 1996). See also FDIC Comment Letter of L. Wayne Sams, Senior Vice President and Assistant General Counsel, First Union Corporation 1-2 (Oct. 30, 1996); FDIC Comment Letter of Julie Krueger, Executive Director, Smart Card Forum 1-2 (Oct. 16, 1996); FDIC Comment Letter of James D. McLaughlin, Director, Agency Relations, Trust and Securities, American Bankers Association 3 (Oct. 31, 1996):

because technological change and innovation are occurring so rapidly, it is likely that we cannot yet conceive the questions that will arise in the near future, let alone answer them. Accordingly, the ABA strongly urges FDIC, as well as the other bank regulatory agencies, to refrain at this time from promulgating new regulations that may well have unforeseeable consequences on the development and structure of new electronic banking products and the payments system.

Id. See also FDIC Comment Letter of Leland M. Stenjehem, Jr., supra note 152, at 7-8 (although deposit insurance might increase consumer confidence in stored value cards issued by banks, that factor might not be significant if the dollar value on each card is small; on the other hand, disadvantages of stored value cards include the institution of costly and cumbersome admistrative procedures by banks, who would have to raise prices of cards, possibly to a noncompetive level, to recoup this investment.); FDIC Comment Letter of Patrick M. Frawley, Director, Regulatory Relations, NationsBank Corporation 2 (Oct. 31, 1996) ("Although it is possible that financial institutions may be able to capitalize on the insured aspect of their products, it is unknown at this time whether the perceived benefit of deposit insurance coverage would outweigh the costs.").

202. FDIC Comment Letter of Daniel W. Morton, Vice President and Counsel, The Huntington National Bank 2 (Oct. 29, 1996). The same institution recommended that the FDIC "not . . . require any

In their comments, financial institutions generally asserted that consumers did not expect that the funds paid to banks by consumers to obtain stored value cards were protected by deposit insurance.²⁰³ The consumer advocate who found that the *opposite* assumption was "reasonable"²⁰⁴ was joined by a financial institution to whom

customer expectations in this area are a *tabula rasa*. As these cards are offered in various different ways and configurations by both bank and non-bank organizations, customers will have little reason to assume that the value in stored cards is subject to federal deposit insurance. Mellon is concerned that making some of the card value subject to insurance may do positive harm by raising the suggestion in customers' minds that all such card value is similarly protected. In sum, Mellon believes that consumer expectations in this area are still unformed but could be inadvertently misled by a partial application of deposit insurance to these cards.²⁰⁵

In its own comment on this issue the New York Clearing House concluded that:

participants in stored-value systems should benefit from clear and conspicuous disclosure as to (i) the insured or non-insured status of these products, (ii) the consequences of losing a stored-value card, and (iii) rights in the event of an

disclosure beyond a statement to the effect that a stored value product is not an account that is insured by the FDIC (if that is in fact the case). The place and manner of giving this disclosure should be within the reasonable discretion of the bank." *Id.*

203. *Id.* at 1 ("With special purpose stored value cards (generally closed systems) or with smaller dollar value open systems, we think it is unlikely that cardholders will think of these as deposit accounts, and thus will have no expectation of deposit insurance coverage."); FDIC Comment Letter of Jill M. Considine, *supra* note 39, at 4 ("Individual consumers and retailers will use stored-value products as a means of payment and exchange, not savings or investment. They will not expect the benefits of deposit insurance protection (and will receive clear and conspicuous disclosure as to the absence of deposit insurance protection.)"); FDIC Comment Letter of John H. Huffstutler, *supra* note 32, at 3 ("To date, our experience with stored value card programs indicates that consumers do not and will not expect that stored value cards are insured products."); FDIC Comment Letter of L. Richard Fischer, Morrison & Foerster L.L.P. (on behalf of MasterCard International Incorporated and Visa U.S.A. Inc.) 2 (Oct. 31, 1996) ("the transfer of value from an insured account to a stored-value card is more analogous to a withdrawal than a deposit and, as such, should not invoke an expectation of insurance protection absent representations to the contrary."); *Id.* at 2 ("In the eyes of a consumer, electronically storing value on a card may likely be equated with the purchase of a subway fare card or a prepaid telephone calling card, rather than with a bank deposit."). *Id.*

204. FDIC Comment Letter of Mark E. Budnitz, Chairman of the Board, Consumer Law Center of the South 3 (Oct. 24, 1996).

Consumers know that when they let a bank have their money, that money is insured. Probably few know enough about the Federal Deposit Insurance Act to realize that it is only their deposits which are insured. When they withdraw money from their bank's insured deposit, whether over the counter or at an ATM, and use that same money to purchase a stored value card sold by the same bank, most likely they reasonably believe the money continues to be insured.

Id. To this expert, "[i]f consumers see the notice informing them that their money at that bank is insured by a federal agency, they can be expected to assume that the insurance coverage extends to the money that the consumer entrusts to the bank, whether in the form of a deposit or in order to purchase stored value cards." Id. at 5.

205. FDIC Comment Letter of Michael E. Bleier, General Counsel, Mellon Bank, *supra* note 187, at 4.

insolvency of a participant in the system. We do not believe providing such disclosure will be particularly burdensome to insured institutions participating in the system.²⁰⁶

VII. OFFICE OF THE COMPTROLLER OF THE CURRENCY BULLETIN 96-48

Underscoring the importance of disclosure under Regulation E and with respect to insurability of underlying funds, the Office of the Comptroller of the Currency's Bulletin 96-48, entitled, "Stored Value Systems: Information for Bankers and Examiners," cited the Federal Reserve Board's and the FDIC's approaches in "encourag[ing] banks to consider the basic disclosures needed for stored value cards they distribute."

The agency identified the following as some of the information whose disclosure should be considered:

- How to use the card
- Where and how the consumer can increase the value on the card
- Whether the electronic cash earns interest, dividends, or any other return
- Where, how, and when the electronic cash can be redeemed
- All fees charged in connection with obtaining or using the card or the electronic cash stored on it
- The name of the entity that issues the electronic cash and its obligation to redeem it
- Whether the consumer is protected in case of a lost or stolen card
- Whether the amount of the electronic cash transferred to the card is insured by the FDIC
- Where does the liability lie if the transaction is not properly consummated
- What happens to electronic cash that is abandoned or expires under the terms of the agreement
- How consumers can resolve disputes involving electronic cash transactions
- The circumstances under which information on a consumer's electronic cash transactions may be disclosed to third parties.²⁰⁸

You can use this card at locations displaying [logo]. Treat it the same as cash. If this card is lost or stolen, you will lose the value remaining on the card. The issuer of this card has no liability for lost or stolen cards. If your card is damaged or is not working, please call [phone number] or write to [address].

^{206.} FDIC Comment Letter of Jill M. Considine, supra note 39, at 8.

^{207.} OCC Bulletin 96-48, supra note 8.

^{208.} *Id.* Cf. Comment Letter of Nessa E. Feddis, *supra* note 12, at 12 (recommending that the card itself disclose: a statement of whether or not the consumer is liable for unauthorized transactions ("A simple statement that if the card is lost or stolen it will not be replaced or refunded should be acceptable."); the amount that the card holds when purchased; any fees imposed by the financial institution other than fees paid when purchased; and a telephone number and address for questions or problems with the card.); Comment Letter of Janice C. Shields, *supra* note 129, at 7 (proposing that at least one side of off-line cards contain information regarding, at a minimum: the consumer's liability for unauthorized transfers; contact information in the event of errors, misuse, machine malfunction, or other problems; and the types of fees that may be assessed on transactions completed with the card); Comment Letter of Marcia E. Heister, *supra* note 23, at 8-9, suggesting the following model disclosure for a card for which no fees were charged:

These areas of disclosure parallel those suggested by the Democratic Staff of the Committee on Banking and Financial Services of the 104th Congress, Second Session, ²⁰⁹ which are also consistent with the disclosures contemplated by the FDIC General Counsel's Opinion No. 8. ²¹⁰ However, it has been questioned whether consumers would read all of these disclosures if they were to be provided by the issuers. ²¹¹

VIII. REFINING THE REGULATION OF STORED VALUE CARD SYSTEMS

In different ways, the Federal Reserve Board in its proposed revisions to Regulation E, the Federal Deposit Insurance Corporation in its General Counsel's Opinion No. 8, the comments received from the financial community with regard to these developments, the American Bar Association's Task Force on Stored Value Cards, and Bulletin 96-48all attempt to resolve the legal consequences of the most basic problem raised by stored value card systems: the separation of the actual cash that the consumer has committed to the stored value card (by paying the issuer or by having the issuer deduct that amount from her account) from the value stored on the magnetic stripe or computer chip in the card itself.

Complicating all comparisons of stored value transactions to cash payments is the fact that, although the merchant receiving such stored value from a consumer might himself be able to convey such value to a third party in exchange for goods or services, the stored value is not converted into "hard cash" such as bills and coins until an issuer or another party has redeemed it. (In this context the value on magnetic stripe or smart cards could be seen as the equivalent of the fabled case of tuna fish that was sold and resold for years until a buyer finally decided to open a can for a taste. "This is terrible!" he exclaimed to the person from whom he'd bought it. The response: "That

Id.; Comment Letter of Broox W. Peterson, *supra* note 168, at 17 (suggesting similar model disclosure on stored value card itself); *Commercial Lawyer*, *supra* note 12, at 655-56 (calling for disclosure to consumer of: the entity or entities that are liable to pay the stored obligation; the terms and conditions under which the obligation or storage device will be forfeited; any restriction on the transferability of the card; and a clear set of rules governing finality or discharge).

^{209.} See CONNECTING CONSUMERS, supra note 23, at 11-12 (recommending that providers of electronic financial products disclose to consumers the following: how to use the product; how to increase value on the product; the fees for the "full range of the transaction process," from the purchase of the product to the consummation of the transaction; the liabilities and protections for the provider and for the consumer, and when they occur in the transaction process; the procedure for a refund; the issuer of the financial product, and the issuer's refund obligations; whether the value on the product is insured by the FDIC; the procedure for dispute and error resolution; the manner in which a consumer can determine the balance on the financial product; whether the value on the financial product earns interest, dividends, or any other return; the means by which a consumer can determine the status of the personal information on the financial product, and who has access to the information; and the manner in which a consumer will be informed as to any change in terms of the financial product).

^{210.} See id. at 11 (noting its own consistency with OCC Bulletin 96-48 and with FDIC General Counsel's Opinion No. 8).

^{211.} See Celia Viggo Wexler, OCC Lists Smart Card Risks, Urges Consumer Disclosures, AM. BANKER, Sept. 11, 1996, at 4 (regulatory counsel for the American Bankers Association and for the Independent Bankers Association of America question whether consumers will read such disclosures).

tuna isn't for eating -- it's for buying and selling!") Clearly, parties engaged in cash transactions have no need for recourse to another party for such redemption.

Part A of this Section discusses the analogies that regulators and commentators have made between stored value cards and traditional financial products and examines the ways in which those comparisons have fallen short. Part B recommends general principles to guide the regulation and classification of stored value cards. Part C applies these principles to suggest amendments, whose actual effect on the Board's language appears in the Appendix, to the Board's proposed system of classification.

A. The Place of Analogies

In constructing its system to categorize stored value cards, the Federal Reserve Board relied heavily on analogies to such familar mechanisms of payment as debit cards and other items that would draw on an "account" for payment. These smooth transitions, though, obscure deeper inconsistencies and, as the comments to the Proposal indicate, threaten to compromise the effectiveness of the Board's conclusions.

The discussion below suggests that, absent agreement to the contrary among the system participants, the closest analogy among financial products to a stored value card may be a cashier's check made out to bearer, which corresponds to funds held by a financial institution (but not directly in a customer's account), allows the stored value to be freely negotiated, and reflects the bank's promise to pay these funds to the bearer of the instrument. Yet even this correspondence is not exact: for instance, payment might be stopped on the obligation represented by a lost, stolen, or destroyed cashier's check but not necessarily on the obligation represented by a value of equal amount stored on a lost, stolen, or destroyed card. Moreover, while the funds underlying the obligation for a cashier's check are covered by federal deposit insurance, ²¹³ no such coverage is available for the funds in certain stored value card systems. ²¹⁴

1. Models of Value Transfer and Value Loss: Stored Value is Not Cash, Personal Check, or Debit Card

Despite the general proposition that stored value cards are intended to function like cash, the emphasis of the Board's classification system on the formation of "accounts" underscores the differences between the transfer and loss of value through such products and through cash.

^{212.} Indeed, as discussed in Part IV, *supra*, the Board often leaped from analogy to conclusion. *See supra* note 117 and associated text (from a finding that off-line accountable systems "strongly parallel[] the functioning of a deposit account," the Board concluded that "such systems involve an account for purposes of the EFTA"); *supra* note 134 and associated text (the Board determined that "an on-line stored-value system is the functional equivalent of a deposit account accessed by a debit card, and thus can be viewed as establishing a consumer asset account for Regulation E purposes."); Proposal, *supra* note 4, at 19,701 (Off-line unaccountable systems involving "substantial[] transaction amounts, and maximum card values, and . . . multiple [card] uses" may be "more comparable to traditional debit cards than the small-value cards" and thus might be within the proper scope of the EFTA.).

^{213.} See, e.g., Metro County Land Title, Inc. v. FDIC, 13 F.3d 883, 866 n.8 (5th Cir. 1994) (unpaid cashier's checks are considered deposits for purposes of FDIC deposit insurance coverage).

^{214.} See supra, Section V.A.

An off-line unaccountable card system, in which the loss of the card results in the loss of the stored funds and in which the only record automatically kept of transactions is maintained on the card itself, most closely approximates a transaction in cash, whose physical transfer instantaneously conveys both a paper (or metal) token and the underlying value: no "account" or account-related records need be involved. The difference introduced by an off-line unaccountable system is that to translate the "stored value" back into coins or paper currency acceptable to commercial parties outside the stored value system a party must redeem it from the issuer.

An off-line accountable system operates similarly, but with the added distinction of a transaction's being recorded at a "central data facility at a bank or elsewhere" external to the card itself.²¹⁵

The analogy to the cash model of value transfer is weakest in the case of an online accountable card, which does not itself contain value but only operates, like a debit card, ²¹⁶ as a virtual key to unlock electronically an actual account held by a financial institution. The loss of such a card, especially if it is protected by a personal identification number or if the consumer could stop payment, would not necessarily entail the loss of the funds.

Of course, it is the separation of the value stored on the card from the funds held by the card's issuer that gives rise to the Board's focus on the existence of an "account" and fosters the insurability questions addressed by the FDIC. If a card loaded with value were truly to correspond to cash withdrawn from a bank account, the consumer would have no more concern that this value would be dishonored in the event of her bank's failure than she would be worried that the ten-dollar bill she had withdrawn would be devalued by such a failure.

2. Models of Dishonor and Discharge: Stored Value is Not Personal Check or Goods

This duality of stored value also underlies an issue not directly considered by the Federal Reserve or by the FDIC but thoroughly analyzed by the American Bar Association's Task Force on Stored Value Cards: the discharge of obligations through the transfer of stored value.

The Task Force examined whether a customer's payment to a seller by the transfer of value through a stored value card system would be discharged when the issuer declines to honor its obligation to redeem the stored value from the seller by paying the seller cash. In other words, could the seller return to the customer for payment in that event?

Not only did this analysis highlight the importance of the parties' attempt to adjust risks by contract, but it also clarified that stored value cards, like a cashier's check made payable to bearer, "are not *instructions to* a bank from a drawer to pay (a check) but rather are more like *promises of* the issuer to pay (a note) upon demand."²¹⁷

^{215.} Proposal, supra note 4, at 19,699.

^{216.} See supra note 134 and accompanying text. See also Coats v. Texas, 712 S.W.2d 520, 522 (Tex. Crim. App. 1986) (en banc) (recognizing that debit cards "permit the holder of the card to obtain cash or transfer funds from one account to another without ever obtaining physical possession of the actual currency").

^{217.} Commercial Lawyer, supra note 12, at 699 (emphasis added). The concept of the negotiability of checks and notes themselves arose "in an atmosphere [in which a]nalogies to goods, bank notes, and

If the customer's payment to the seller through a stored value card payment system were treated like the payment of cash, the obligation would be discharged upon the effective transfer to the seller of the stored value, which represents an obligation of the issuer to redeem the funds. If the issuer refused to redeem this value, the seller would be left to bear the loss (or to sue the issuer's receiver or trustee in bankruptcy).²¹⁸

Alternatively, if the rules for payment of checks were to apply, the seller's action would not be against the issuer who dishonors the check but against the consumer, whose own obligation to pay would not have been automatically discharged.²¹⁹ If, however, the acceptance of the stored obligation were treated as the acceptance of a traveler's check or of a cashier's check made payable to bearer, and the issuer dishonored the obligation, the merchant could look only to the consumer and then only if there were some analogy to indorsement liability on the consumer's part.²²⁰

One possible model for the transfer of the stored obligation is that of "goods" under Article 2 of the UCC, which would allow the merchant to replevy the merchandise from the consumer or to sue the consumer for her undischarged obligation to them. Another model is drawn from the rules for credit and debit card transactions, under which the consumer's monetary obligation to the seller would be discharged when the consumer delivered a properly signed sales draft to the seller, who would then have recourse only against the issuer or other financial institution members of the card association to which the issuer belonged.

The Task Force concluded that in this context if the discharge of the buyer's obligation to pay was not covered contractually courts would probably adopt the cashier's check model as most in keeping with the parties' expectations. Observing that the participants in stored value systems sought commercial predictability in these matters, the group recommended that, as in credit card and debit card systems, "the proponent of any new payment product attempt to provide a clear set of rules governing finality and discharge in the contracts or system rules between the issuer and the users." Similarly, given the difficulty inherent in identifying a particular stored

coin were particularly important." See Curtis Nyquist, A Spectrum Theory of Negotiability, 78 Marq. L. Rev. 897, 902 (1995). Indeed, the arguments in one of the most celebrated early decisions in this field "invoke[d] a dazzling array of analogies to other types of property: goods, money, lottery tickets, bills of exchange, non-bank notes, Exchequer notes, and land." Id. at 956 (citing Miller v. Race, 97 Eng. Rep. 398 (K.B.1758) (transferee of stolen bank note could take right, title, or interest better than that of transferor)).

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218. Commercial Lawyer, supra note 12, at 697.
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The cash analogy does not seem to fit because... there is virtually no credit risk with a claim against the United States. The check analogy is also imperfect because the Seller probably does not regard [the buyer] as his debtor; the Seller probably assumes that he will never see [the buyer] again.... The liability of the drawer of a cashier's check is treated as being the same as that of the maker of a note, rather than that of the drawer of a check.

The Task Force does not believe an analogy either to Article 2 or Article 4A of the UCC is appropriate.

Commercial Lawyer, supra note 12, at 699 (footnotes omitted).

^{219.} Id. at 697-98 (citing U.C.C. § 3-310(b) (1995)).

^{220.} Id. at 698 (citing U.C.C. §§ 3-310, 3-411, 3-412 (1995)).

^{221.} Id.

^{222.} Id. at 698-99.

^{223.}

^{224.} Id. at 700.

obligation as lost, stolen, or destroyed,²²⁵ the Task Force urged issuers to consider including in their contracts or system rules provisions to govern the rights of parties to stop payments made through stored value card systems.²²⁶

B. General Principles

From the difficulty of regulators and the regulated community in attempting to create compelling analogies from existing payment mechanisms to stored value cards, several counterbalancing principles may be drawn for creating proper guidelines in this area. Each of these principles itself suggests the balancing of subsidiary considerations.

1. Need for Federal Regulation

a. A new payment systems technology warrants federal regulation in direct proportion to (i) the degree that its apparent departure from existing legal models creates legal uncertainty about the risks borne by the parties, and (ii) the aggregate value of the affected transactions

Although not offered as a strictly mathematical principle (especially because the variables involved seem extraordinarily difficult to quantify), this statement attempts to combine the various elements that would justify regulation. As the discussions in Section VIII.A and other areas of this Article suggest, there is considerable uncertainty concerning the extent to which stored value card systems are governed by the same type of legal arrangements that govern cash, particularly in the area of stopping payment and the area of consumer liability for an allegedly unauthorized transfer. To this extent, the need for regulation of these financial mechanisms specifically in terms of consumer

225. Id. at 718.

Many of the new, off-line payment products will not allow a user to uniquely identify the stored obligation. If the stored obligation cannot be identified, the issuer has no way of distinguishing it when it is presented for redemption and, therefore, cannot act on the stop payment order. Under either a cash or check analogy, the inability to uniquely identify the obligation will result in the loser bearing the risk of lost, stolen, or destroyed obligations.

Id. See also supra notes 96-97 and accompanying text.

226. Id. at 720.

A cash analogy will likely be used [by courts examining this issue] where the check analogy fails; namely, where the obligations are not individually identifiable and/or it is not possible to provide advance warning to sellers or other transferees who take the obligation in good faith

If a court views the obligations like checks for these purposes, the issuer may be prohibited from contracting away a user's right to stop payment, [unless the parties can use the Uniform Commercial Code's tolerance for modification or elimination of rights in the absence of express statutory prohibition].

protection²²⁷ is similar to that perceived by Congress in enacting the EFTA to protect consumers who were engaging in electronic fund transfers.²²⁸

Proponents of domestic regulation of stored value cards cannot yet compare the need for such regulation with that perceived by the Senate Banking Committee's EFTA Report, which found that electronic fund transfer systems "now involve billions of dollars annually and are growing in size." However, that Committee's concern that funds transfer systems "must have clearly defined rules to operate fairly, efficiently, and with public confidence" is directly relevant to the increasing public adoption of stored value card systems which, by their nature, may involve significant aggregate amounts expended in many small-value transactions. 231

b. A new payment systems technology warrants federal regulation in inverse proportion to the degree that affected participants in commerce are able and likely to bargain fairly around the legal uncertainties created by the technology

Several regulators have indicated that government should leave the parties free to bargain about the details of their stored value agreements.²³² However, given consumers' lack of incentive or knowledge to bargain, and likely reluctance to litigate, especially where their adversaries would tend to be sophisticated financial institutions and the amount at issue relatively small,²³³ federal regulation is warranted.²³⁴

- 227. Sarah Jane Hughes, A Call for International Legal Standards for Emerging Retail Electronic Payment Systems, 15 ANN. REV. BANKING L. 246 (1995) (justifying the development of rules governing payment systems from the perspective of consumer protection, because they "may occupy terrain that other regulatory 'models,' such as law enforcement and monetary policy otherwise might dominate. Rules for payments systems based solely on law enforcement or monetary policy models would shape the industry's future paths very differently") [hereinafter Call]. See also supra note 3 (listing law enforcement and monetary policy issues identified by the Vice Chairman of the Federal Reserve Board of Governors, the Comptroller of the Currency, and the Financial Crimes Enforcement Network).
- 228. See supra note 57 and accompanying text; Infrastructures, supra note 160, at 59-60 (identifying one of "only two justifications for direct legal intervention through statutory law or agency regulation [of electronic payment systems as] a demonstrated problem [concerning] nonredemption or dishonor"); Call, supra note 227, at 245-46 (observing that rules governing existing systems "may not provide adequate protection for customers of the new payments system.").
 - 229. See supra note 67 and accompanying text.
- 230. See supra notes 51 and 67 and accompanying text (observing that the regulation would enhance consumer confidence in new financial technology); Infrastructures, supra note 160, at 59-60 (identifying the second of two justifications for regulation as "a reluctance of consumers and merchants to accept new systems until more governmental regulation is in place."); Call, supra note 227, at 245-46 (regulation supported by the argument that "[a]dequate customer protection rules would foster wider acceptance of these technologies in lay circles and spur additional Internet or smart-card commercial developments").
 - 231. See supra note 13 and accompanying text (estimating potential size of stored value market).
- 232. See supra notes 45 and 50 and accompanying text (encouraging participants in stored value systems to establish their own rules). See also Michael Rustad & Lori E. Eisenschmidt, The Commercial Law of Internet Security, 10 HIGH TECH. L.J. 213, 263 (1995) (finding contract law, rather than tort law, "particularly well suited for the new information technologies" because it "enables the parties to forge unique solutions to emergent legal problems"). Those commentators, however, recognize that contract law "does not effectively address liability for injuries to third parties." Id. at 264.
- 233. Edward Rubin, Efficiency, Equity and the Proposed Revision of Articles 3 and 4, 42 ALA. L. REV. 551, 569 (1991) (criticizing Article 3 because "[d]etermining fault [under that statute] requires a

Such regulation, though, might appropriately be limited to setting floors for certain consumer protections, above which the parties could bargain. In this context, the purchasers and users of stored value cards containing relatively large amounts of money could be presumed to be more financially sophisticated and to have some real bargaining power with respect to the issuers.

Indeed, one commentator has championed the EFTA and Regulation E as "appropriate models" for the "protection of consumers and small merchants against [form contract] overreaching" by financial institutions, because these governmental mandates "leave the details to private contracting, while requiring disclosure and fair dispute resolution systems, and imposing limits on the magnitude of the risk that can be shifted to those with little bargaining power."²³⁵

complex, fact-based adjudication that will rapidly devour the amount at issue in all but the largest cases.... [C]onsumers can virtually never enforce their rights against a bank because it will simply be too expensive to do so") [hereinafter *Efficiency*].

234. See Call, supra note 227, at 245-246 (argument to regulate Internet-payments systems supported by the fact that such systems "will probably carry a high volume of low-dollar-value transactions [and thus that] the legal system will have diminished capacity to deal with these errors and disputes without standardized rules" and by need for legal framework to govern efficiently a system notable for the lack of ties between its members and the large value of expected transactions). Cf. Trotter Hardy, The Proper Legal Regime for "Cyberspace," 55 U. PITT. L. REV. 993, 1026 (1994) (espousing, in the context of defamation, copyright, privacy, and obscenity issues concerning the Internet, the "clear policy that when a 'new' problem is identified in cyberspace, we should initially respond with the lowest, most decentralized level of control possible"). The basic rules governing stored value systems cannot be characterized as "problem[s] that can be worked out satisfactorily between two people," especially where the issuer of the cards has much greater bargaining power than the consumer. Id.

235. Infrastructures, supra note 160, at 60. One commentator has recommended that the details subject to renegotiation among participants in worldwide electronic payment systems include trade usages to a much greater degree. See Raj Bhala, Self-Regulation in Global Electronic Markets Through Reinvigorated Trade Usages, 31 IDAHO L. REV. 863, 865 (1995) (arguing that such self-regulation would reduce uncertainty, provide flexibility and efficiency, and preclude the "reactive and cumbersome" process of "domestic and international contract law reform" in the context of credit risk and emerging technology). Such trade usage would no doubt encourage the creation and adoption of new metaphors for the operation of these payment systems. See David R. Johnson & Kevin A. Marks, Mapping Electronic Data Communications Onto Existing Legal Metaphors, 38 VILL. L. REV. 487, 514-515 (1993) (predicting that, "although existing legal metaphors will fail [to capture the essence of questions concerning Internet-based communications] because the circumstances in cyberspace are different from those in the physical world," the metaphors developed by participants in Internet discussion groups as a shorthand for contractual terms and arrangements "will evolve and develop a life of their own"). Id.

2. Technology-Neutrality

a. New regulation should not unnecessarily undermine the development, adoption or implementation of regulated payment technologies

A major concern both of regulators ²³⁶ and of financial institutions that responded to the Board's proposed revisions to Regulation E²³⁷ was that the process of regulation itself will distort the evolution of stored value card systems. In addition, commentators have urged that any regulation of new technologies in the commercial area be drafted broadly enough to be adaptable to systems that have not yet been developed.²³⁸

b. New regulation should focus on the underlying purposes of payment mechanisms as reflected by the technology employed

Certainly, stored value cards should be treated, as nearly as possible, the same as other payment mechanisms that serve the same purposes in the same way. The difficulty so far, of course, has been in comparing the purposes and mechanisms of stored value card systems with those of more traditional payment systems.

However, on a different level, the level of technology embedded in stored value card systems can in fact distinguish the "purpose" of making payments through such systems rather than by cash, negotiable instruments, debit cards, or credit cards. All of these mechanisms operate to transfer value, but stored value cards offer the consumer a special degree of convenience. Moreover, reflecting the degree to which the different types of stored value cards distinguished by the Federal Reserve Board use different technologies (magnetic stripe versus microprocessor, on-line versus off-line), consumers may prefer certain of these categories for certain types of transactions. For instance, a consumer who does not wish to carry around pockets full of change and bills to buy several different small-value items at several different locations each day may

^{236.} See supra notes 40-45 and accompanying text (regulators state that the market, not government, should determine which financial products and services are best for consumers); supra note 111 and accompanying text (Board of Governors dismisses anticipated objection that its classification system would encourage designers to create off-line unaccountable rather than off-line accountable systems). Cf. Gould, supra note 11, at 529 (quoting S. R. 9404, 9412 (1978) to the effect that the EFTA "provides minimum regulation of competition and was not premature in defining participants' rights and liabilities. Its provisions apply regardless of how the system actually develops."); Call, supra note 227, at 236 n.199 (quoting the Permanent Editorial Board's Introductory Memorandum to the New Uniform Payments Code Report Draft No.2 at 1, as stating that "[t]he guiding philosophy... was that the new legal framework should not distort user choices among payment systems, e.g., as between checks and debit cards.").

^{237.} See supra notes 176 and 177 and accompanying text (financial institutions suggest that Board's classification system would encourage designers to create off-line rather than on-line systems).

^{238.} See, e.g., Patricia Brumfield Fry, X Marks the Spot: New Technologies Compel New Concepts for Commercial Law, 26 Loy. L.A. L. Rev. 607, 614 (1993) (attempts to revise "writing" requirements of commercial law to include computer and other technologies should be "media neutral, rather than embracing and including specific technologies... by the time the drafting and adoption process has been completed, new technologies not included in the definition may be part of established commercial practice....") In addition, "any proposed [statutory or regulatory] definition should be tested against emerging technologies and against business practices currently in use [as well as against] existing legal principles to ensure that redefinition does not distort existing legal concepts." Id.

prefer a stored value card for this purpose, and for further convenience might rather use an off-line than an on-line card.

To this extent, the American Bankers Association is incorrect in observing that "consumers will now be oblivious to the operational distinctions; regulatory protections and disclosures that vary substantially according to the card's architecture rather than their function will cause consumer confusion. The focus should be on how the card is used, not on its technological attributes."²³⁹ Not only are some "operational distinctions" apparent to the consumer (for example, on-line cards will presumably require a slight delay for the authorization process to be completed), but these very distinctions by "technological attributes" may influence the consumer's use of the card for specific purposes.

Related concerns uniting technology and purpose are that a regulator's categorization system be: flexible enough to accommodate technological developments that would change the method of operation of cards or combine their modes of operation into one card²⁴⁰; general enough to apply not only to bank issuers of stored value cards but also to nonbank issuers²⁴¹; and specific enough to incorporate the

^{239.} See Comment Letter of Nessa E. Feddis, supra note 12, at 5. Conversely, "the regulation should not treat differently cards that function the same, but happen to use a different technology." Id. at 8. See also Peter A. Alces, A Jurisprudential Perspective for the True Codification of Payments Law, 53 Fordham L. Rev. 83, 90 (1984) (hereinafter Jurisprudential Perspective) (identifying as the "guiding philosophy" of the proposed Uniform New Payments Code, see infra note 253, the principle that "[p]ayments legislation should not impose artificial legal distinctions among the various payments media. Before providing one transactor liability rule for checks and a different rule for credit cards, there must be a substantial reason for doing so."). In that author's view, "It is no longer appropriate, if it ever was, to distinguish between payments systems as either electronic or paper-based. The intrusion of computers into payments procedures has eliminated any bold line that might have separated paper-based devices (checks and notes) from those devices that operate in concert with magnetic tapes or telephonic tones." Id. at 103.

^{240.} See, e.g., Comment Letter of Gary Lorenz, supra note 128, at 4 (suggesting that although multi-application cards such as "a smart card with a magstripe [that] could access both a demand deposit account at a bank and an on-line accountable stored-value card database while having a[n] off-line, unaccountable stored-value in the smart card module itself' would be able to "provide three distinct categories of service," Regulation E "should apply to each category of service individually without regard to the number of categories of service that are provided on a single card.").

^{241.} See Comment Letter of Nessa E. Feddis, supra note 12, at 5 (Federal Reserve Board "should make clear that [Regulation E] applies equally to nonbank and bank issuers. There should be no exemptions or special treatment... made for nonbanks. Application of consumer protections should not be based on the type of entity issuing the card."); Comment Letter of Broox W. Peterson, supra note 168, at 7 (under section 903.8 of the EFTA and to prevent "inappropriate competitive advantages," Regulation E should apply equally to all issuers of stored value products, whether or not issuer is a bank); Comment Letter of James A. Pihera, supra note 71, at 4 (asserting that "equal regulatory treatment [of 'traditional financial institutions' and other issuers of stored value cards] is necessary to maintain a level playing field"). See also John P. LaWare, Electronic Money Will Bring Both Opportunity and Risk, AM. BANKER, Feb. 13, 1997 at 28 (recommending that, since "total exclusion" of nonbanks from issuing electronic money "may be unrealistic," they instead should be required to "meet all the regulatory, liquidity, and supervisory requirements of banks").

special purposes that could be inferred from a system's being closed²⁴² or involving reloadable²⁴³ cards.

3. Adjustment of Risks

a. Although risks should generally be borne by the party best able to minimize the loss to the system, the card issuer may have an incentive to adjust such risks in order to subsidize consumer adoption of the system

Generally, a commercial payment system would place losses on the party best able to minimize them.²⁴⁴ However, there are two reasons why regulators might desire either to reduce the consumer's liability below the dictates of this principle or to allow the parties to adjust the consumer's liability contractually.

First, from the consumer's point of view, the primary advantage of stored value cards is the convenience of not having to carry cash or a variety of different payment devices. Indeed, this non-economic benefit to the consumer of using a stored value

242. See supra Section I. C. See also Comment Letter of Richard A. White, supra note 115, at 2 (suggesting that "an exemption be made [from Regulation E requirements] for any stored value system which is issued by a transit provider and used for mass transit"); Comment Letter of Marcia E. Heister, supra note 23, at 3 (arguing for exemption of such cards on the grounds that "[t]hese 'single-purpose' cards have been in widespread use for several years" and are unlikely to be confused by consumers with debit and credit cards); Comment Letter of Kurt Helwig, supra note 74, at 6 (asserting that exemption would be justified because "the market will provide adequate protections, particularly as the merchant/provider of services has every economic reason to keep its customer happy").

This Article does not recommend the general exemption from Regulation E of closed stored value card systems. Under the proposal set forth *infra* at Section VIII.C., such systems would be exempted from most of the Regulation's requirements if they were off-line; if they were on-line with a maximum value less than a *de minimis* amount; or if they were on-line with a maximum value greater than another threshold amount and the parties had negotiated the exemption.

243. See, e.g., Comment Letter of Mark E. Budnitz, et al., supra note 129, at 2 ("[R]estrictions on unsolicited issuance seem less necessary for cards which cannot be reloaded; however, where a card is capable of having value replenished, at a minimum, there should certainly be adequate disclosures regarding rights and responsibilities."); Comment Letter of Larry A. Gardner, Senior Vice President, 1st Source Bank 5 (July 30, 1996) ("We support the proposed changes [exempting stored value cards from requirements of periodic statements and annual error resolution notices] but do feel that the proposed modifications should be different for 'reloadable' cards. In the case of 'reloadable' cards, there would seem to be an ongoing relationship and a higher degree of risk of loss to the consumer.").

244. Efficiency, supra note 233, at 564 (claiming that "[t]he most efficient way to allocate losses, which usually appears in negotiated contracts between parties with equivalent information, is to place liability for clearly avoidable losses on the party responsible for the loss and divide liability for other losses between the customer and the financial institution" and observing that the financial institution would generally shoulder the bulk of the loss because it is best able to gauge and set avoidance costs and to spread the loss to all users through its fee structures). This commentator recommended that:

with respect to checks, enough liability should be imposed on the consumer to induce precautions that would minimize losses; all remaining liability should be imposed on the bank and thus be spread across the entire customer base. In other words, the consumer should lose enough so that it matters, but not enough to cause a personal crisis.

Id. at 582.

card, particularly as opposed to using cash or a credit card, appears to be greatly outweighed by the economic benefits to merchants and to card issuers.²⁴⁵

Second, as one commentator observed in the context of the EFTA, a payment system's allocation to the issuer and merchant of risks related to unauthorized transfers will inevitably be adjusted through the fees that these parties charge the consumer to use the system.²⁴⁶ Therefore, "minimizing total system losses is the only sensible objective of risk allocation statutes."²⁴⁷ Balanced against this tendency, though, is the issuer's incentive to bear more losses than strictly necessary. By endorsing even those rules that encourage a certain level of customer negligence, the issuer provides a "subsidy" that encourages consumers to adopt the new technology, leading to greater long term gains for the issuer.²⁴⁸

Thus, on "economic efficiency" grounds, the EFTA may be justified in omitting any equivalent to the "stop payment" provisions common in credit card and check payment systems, since such features "would significantly detract from the certainty of payment, the chief economic advantage of POS to merchants." However, in this light, the statute's limitation of consumer liability, even though it might have been approved by both consumers and issuers, could be seen as introducing systemic

245. See supra notes 16 - 19 and accompanying text. See also THE HISTORY OF MONEY, supra note 13, at 241 (observing that "[t]he movement toward electronic money was not the result of public demand by people who were dissatisfied with the old forms of money. The change has been technologically driven by businesses seeking a new way to make money [by] making money safer and easier for customers and merchants to use"); Jeffrey Kutler, Smart Card Forum Eyes Past for Light on Present, AM. BANKER, Sept. 20, 1996, at 11 (quoting industry executive as informing conference that "[t]here isn't much in the stored-value card for the consumer" but that smart cards would tend to benefit merchants.); Comment Letter of Mark E. Budnitz, et al., supra note 129, at 5 (significant economic advantages to issuers, such slippage, use of float, and seignorage, "will serve -- substantially -- to offset their consumer protection compliance costs.").

246. See Note, Overcoming the Obstacles to Implementation of Point-of-Sale Electronic Fund Transfer Systems: EFTA and the New Payments Code, 69 VA. L. REV. 1351, 1354 (1983) (hereinafter Overcoming).

247. Id. See also Clayton P. Gillette, Rules, Standards, and Precautions in Payment Systems, 82 VAL. REV. 181, 206 (1996) [hereinafter Rules] (in terms of public choice theory, "[t]he issue of whether consumer groups or financial institutions are more capable of influencing legislative regulation becomes irrelevant if the groups share similar interests."). This commentator suggests that the sharing of interests by banks and consumers may also account for "the mix of rules and standards relating to check fraud." Id. at 211.

248. Id. at 209, recognizing that:

[b]anks may wish to subsidize consumers, even negligent ones, in order to encourage the use of ATM cards. This would be a rational strategy if ATM transactions cost less than the same transactions executed by human tellers [and] should be even more attractive if banks fear that cards will be underutilized because customers resist technological developments or prefer the tangible evidence of a transaction that a check offers Immunity rules, such as liability caps, perform this function.

Id.

249. Overcoming, supra note 246, at 1379.

250. These limitations were implemented by Regulation E. See supra note 81 and associated text.

251. Rules, supra note 247, at 206 (identifying "the possibility that the interests of all parties converge on a single rule [as] the best explanation for existence of the liability cap for cards, notwithstanding that the rule fails to deter customer negligence."). See also Thomas C. Baxter, Jr., The UCC Thrives in the Law of Commercial Payment, 28 Loy. L.A. L. Rev. 113, 125 (1994) (observing that

inefficiencies by failing to give consumers the proper incentive to prevent unauthorized transfers. ²⁵²

Regulators of stored value cards and other payment systems can reconcile these tendencies by strictly limiting a consumer's liability for unauthorized transfers made through cards whose capacity falls below a set dollar-value threshold.²⁵³ Above this level, the consumer's use of the system will not be subsidized and she will have the proper incentives to prevent unauthorized transfers.

b. Consumers' reasonable expectations of liability should be met

All parties appear to agree that good regulation would take into account the legitimate expectations of consumers with regard to stored value cards in general, as well as of the specific types of cards in each subcategorization proposed by the regulation. However, at the same time that financial institutions cite uncertainties spawned by the infancy and rapid evolution of stored value card systems in the United States, ²⁵⁴ they also assert that the Board's proposed revision of Regulation E would

"[i]t is far easier for consumer groups to participate in the federal legislative process, which tends to be remarkably less laborious than the [National Conference of Commissioners on Uniform State Laws] process."); Efficiency, supra note 233, at 586-587, 592 (noting that "[a]t the time the EFTA was drafted, [the American Bankers Association and the "consumer lobby"] were in relative equipoise and the statute largely reflects the bargain that they struck.... This is why the EFTA is superior [to the U.C.C.], in terms of both economic efficiency and social equity.").

252. Overcoming, supra note 246, at 1360 ("by limiting consumer liability for losses that the consumer could best avoid, Congress has made financial institutions and nonnegligent consumers the insurers of negligent consumers," thus encouraging financial institutions involved in point-of-sale networks to start or raise fees, or reduce or end their participation in these payment systems.). See also Rules, supra note 247, at 191 (observing that under U.C.C. § 3-406(a), checking account customers are liable for an amount up to the amount of the check if their negligence substantially contributes to a forged signature or alteration of a check, and would therefore rationally "invest in precautions up to the expected value of loss of the check," but that holders of ATM cards, whose liability is limited under the EFTA, are thus "implicitly directed not to invest more than the capped amount of their liability in avoiding losses, regardless of the expected value of failing to take additional care.").

253. *Id.* at 1362 (proposing a bifurcated system under which a consumer drawing on an account for personal, family, or household purposes in a transaction or series of transactions with aggregate amount under \$500 would have a maximum liability of \$50 for an unauthorized transfer but for any transaction or series of transactions involving an amount over \$500 would be accorded no special protection from liability for the whole amount) (citing § 200 of Draft No. 2 of the Uniform New Payments Code (UNPC)).

That Draft, released by the 3-4-8 Committee of the Permanent Editorial Board for the Uniform Commercial Code on May 24, 1982, *Id.* at 1352 n.9, was "an attempt to reconcile the Uniform Commercial Code with emerging electronic transfer technology." *Id.* at 1361. The New Uniform Payments Code was intended to be "applicable to all forms of value transfer, not just EFT's." *Id.* at 1352 n.9. *See also Jurisprudential Perspective, supra* note 239 at 115 (Draft No. 3 of the New Uniform Payment Code, which was released by the Committee in June 1983, "alternately succeeds (in the stop payment element of section 200) and fails (in [its inclusion of a] reversal principle...")).

The UNPC drafting effort was ultimately abandoned. By one account, the project was doomed by a combination of: opposition from the New York Clearing House Association, which did not want federal consumer protection provisions to be incorporated into state law; consumer groups, which saw the Code as weakening the protections already available under federal law for credit card customers; and an "academic community [that was] bewildered or uninvolved." See Efficiency, supra note 233, at 557-558.

254. See, e.g., supra notes 70-75 and accompanying text.

contradict consumers' definite expectations about the operation of such cards.²⁵⁵

This apparent inconsistency implies that regulators should assume that consumers in fact know little about the methods by which such cards operate and about the technical and legal distinctions between various types of cards. Indeed, to the extent that stored value card systems with a variety of permutations of features (to say nothing of cards that combine stored value features with debit, ATM, and credit card features) are just now emerging in the domestic market, it would seem that consumer expectations about the legal ramifications of these systems could hardly be well-developed.

This confusion also suggests that scrupulous disclosure be made to consumers of significant liabilities and risks associated with stored value cards. The most effective disclosure mechanism would be to print the most significant terms on the cards themselves.²⁵⁶

C. A New Proposal

With the above guidelines in mind, the following set of suggestions might be considered to simplify the classification system proposed by the Federal Reserve Board of Governors for regulating stored value cards. The effects of these revisions on the Board's proposals are also indicated in Chart 4, which modifies Chart 2 with regard to the categorization of card types, and Chart 5, which modifies Chart 3 with regard to the relevant disclosures to be made to the consumer.²⁵⁷ The practical implementation of these suggestions is indicated in the Appendix, which revises the language of the section that the Board sought to add to Regulation E.²⁵⁸

1. Collapse the Board's Two Fuzzy Distinctions into One Clear One

a. Abandon the Accountable/Unaccountable Distinction

From several perspectives it seems questionable whether a consumer who has given value to an issuer in exchange for a stored value card has established an "account" with that issuer. On a theoretical as well as a practical level, the purchasing of a stored value card might be more accurately compared to the conversion of the funds paid to the issuer into a form other than that of an account. Moreover, operational difficulties in implementing the accountable/unaccountable distinction include questions of the location, storage, and transmission of the record of value held by the issuer; technological advances may blur this distinction further. Finally, the

^{255.} See supra Sections V.A.4 (consumers allegedly do not expect stored value card systems to involve accounts in their name), V.B.2 (consumer expectations thwarted by accountable/unaccountable distinction that Board seeks), and V.C.2 (consumers do not expect on-line/off-line distinction).

^{256.} See, e.g., Comment Letter of Mark E. Budnitz, et al., supra note 129, at 6 (recommending that user fees, user liability, issuer's name address, and any balance checking phone number be disclosed on face of card, and in particular for reloadable cards, "for many consumers are unlikely to keep disclosures contained in a separate piece of paper over the extended period of time a reloadable card can be used.").

^{257.} See Charts 2 - 5 infra pp. 393-398.

^{258.} See Appendix infra pp. 387-90.

^{259.} See supra section V.A.

^{260.} See supra section V.B.1.

accountable/unaccountable distinction may disappoint the expectations of, or at least confuse, consumers.²⁶¹

The off-line accountable and off-line unaccountable systems should therefore be merged into the general category of "off-line" systems. 262

b. Clarify the On-line/Off-line Distinction

By contrast, the Board's on-line/off-line distinction, which revolves around whether a transaction entered into at a merchant's terminal must be authorized by a central database, is more directly technological rather than legal and is correspondingly more robust.

Although there have been suggestions that consumers cannot distinguish between on-line and off-line cards, ²⁶³ the consumer should be able to detect this step of the procedure if for no other reason that, as with credit card transactions, there will be a slight delay while the approval process occurs (and on occasion, when access to the database is disrupted, authorization will not occur). The difference between on-line and off-line systems will be even clearer if on-line systems are defined as those in which a transaction must *always* be authorized on-line. ²⁶⁴

2. Exempt Off-line Systems from the Application of Regulation E

Off-line systems would appear to be used, like cash, primarily for purposes of convenience and not for maintaining records of transactions. To exempt off-line systems from the application of Regulation E except for a requirement of modified initial disclosures would effectively alter the Board's proposals for off-line systems only in that issuers of off-line accountable systems with a maximum card value of \$100 and issuers of off-line unaccountable systems would now be subject to a requirement of modified disclosure.²⁶⁵

^{261.} See supra section V.B.2.

^{262.} Although the Board's category of "on-line systems" appeared to include only on-line accountable systems, *see supra* note 105, any on-line unaccountable system should correspondingly be merged into this general category.

^{263.} See supra sections V.C.1 and V.C.2.

^{264.} See Comment Letter of Stanhope A. Kelly, supra note 81, at 4 ("[I]f a card is developed that combines both an on-line and an off-line feature (for example, a combined ATM/off-line stored value card), only the on-line transactions [should] be covered by the consumer liability provisions of Regulation E."); Comment Letter of Daniel W. Morton, supra note 81, at 14 (proposing that the Board "[I]imit the definition of online card to those that always require an authorization from a data base separate from the card itself or the merchant terminal before the transaction can proceed"). See also supra note 159 and accompanying text.

^{265.} Under the Proposal, off-line unaccountable systems would appear to be exempt from the requirements of Regulation E. See supra section IV.A.

Off-line accountable systems with a maximum capacity of \$100 would be exempt from all of the requirements of Regulation E. See supra section IV.B.

Off-line accountable systems with a greater capacity would be subject to Regulation E except that: issuers would not have to provide to consumers transaction receipts or periodic statements of account; the consumer would, unless otherwise arranged, lose the value stored on a lost card; and an issuer could send an unrequested card to a consumer so long as the card would not access the consumer's existing deposit account. Id. That is, some form of disclosure requirement and the issuer's obligation to provide error

3. Apply Regulation E Only to On-line Systems With Stored Value Exceeding a De Minimis Level

If the *de minimis* level were set at \$100²⁶⁶ and the requirement of periodic statements were replaced with the issuer's obligation to provide account balance and transaction history to the cardholder upon request where the cards were designed to be reloadable or quickly exhausted and discarded the Board's proposal with respect to online systems would be unchanged.²⁶⁷ Indeed, as one commentator recognized:

[f]or systems requiring on line verification, the existing rules [i.e., Regulation E] concerning risk of loss make as much sense as they do in the ATM, debit and credit card environment. Once notified of card theft or unauthorized use, the provider of an on line accountable system would be able to prevent future transactions. ²⁶⁸

4. Allow the Parties to Contract for Certain Non-Default Arrangements in Online Systems With Stored Value Exceeding a Second, Higher Threshold

When the dollar value that can be stored on the card increases to a certain amount or proportion beyond the *de minimis* level, the consumer may be presumed to have the ability, financial sophistication, and bargaining power to negotiate some terms with the issuer. As a result, beyond the minimum modified disclosure requirements, with respect to these cards, the parties should be allowed to make their own arrangements, some of which might be disclosed on the face of the card itself, concerning the applicability of the various requirements of Regulation E.

Some of the terms that might be nonnegotiable by the consumer with regard to a lower-value card but subject to adjustment at this level are: the expiration date of the card; whether the obligation represented by the monetary value on the card is discharged when the card is presented to the merchant by the user or when the issuer actually honors the obligation to the merchant; whether the card can be transferred and, if so, what constitutes unauthorized use and whether the customer will be liable for such use; and whether the issuer can in some circumstances be liable for an amount greater than the value contained on the card (for example, for special, consequential, or incidental damages).²⁶⁹

IX. CONCLUSION

Generations after the legendary village elder offered his oversimplified explanations of then-emerging technology, stored value card systems have as a means

resolution procedures would remain.

^{266.} For discussion of the proper calibration of the *de minimis* level, *see supra* note 128. This Article does not take a position on the value at which the *de minimis* threshold should be set.

^{267.} See supra section IV.C.

^{268.} Comment Letter of R. David Whitaker, supra note 109, at 5.

^{269.} See Holli Hart, Card Frontiers: There's Nothing Dumb About Smart Card Contracts, Am. BANKER, Jan. 29, 1997, at 10 (discussing negotiation of these terms).

of transferring value supplanted both the subject²⁷⁰ and the substance²⁷¹ of his analogy. However, the temptation remains for consumers, regulators, and card issuers to adopt comparisons facially plausible but substantively erroneous.

Despite this danger, federal regulation in this area should not be regarded as putting the cart before the horse. Indeed, increasing consumer acceptance of stored value payment systems and the proliferation of technological varieties of these products indicate a need for overarching guidance. Because many such systems are designed to operate with small amounts and without the need for documentation of transactions, these may properly be exempted from the requirements of Regulation E in keeping with the consumer's desire for convenience. Systems operating in a middle range of transaction and card value should accord the consumer the benefit of protections of Regulation E, while those in the highest range should allow the consumer and issuer the freedom to negotiate release from some or all requirements of the Regulation.

Indeed, beyond a certain point, comparisons and analogies to other payment systems might be seen as hindering rather than aiding the development of further regulation of stored value cards. After all, as one legal scholar is reputed to have said, the "legal mind" is one that "can think about something that is related to something else without thinking about the thing to which it is related."²⁷²

^{270.} See Commercial Lawyer, supra note 12, at 667 (characterizing the telegraph as the "midwife at the birth of FedWire," the system of cable transmissions linking the Federal Reserve banks in their early years, and observing that "the system reached maturity when it was wed to the computer").

^{271.} SeeThe History of Money, supra note 13, at 242 (stored value card systems function as "a faster version of the pony express but with the computer and telephone replacing the horses").

^{272.} LON FULLER, THE MORALITY OF LAW 4 (1964) (attributing the statement to Harvard law professor Thomas Reed Powell).

APPENDIX

SUGGESTED REVISIONS TO FEDERAL RESERVE BOARD'S PROPOSED ADDITION TO REGULATION E NEW SECTION 12 C.F.R. § 205.16²⁷³

(suggested additions appear in boldface and underlined; suggested deletions appear [in brackets and strikeout])

(original numbering of sections and subsections has not been changed)²⁷⁴

§ 205.16 Certain stored-value services.

- (a) General. The rules in this section apply to stored-value accounts as defined in paragraph (b) of this section.
 - (b) Definitions. For purposes of this section, the following definitions apply:
 - (1) Off-line stored value account means a balance of funds recorded on a card that a consumer may use at electronic terminals to obtain cash or purchase goods or services, [where the record of such balance is also maintained on a separate database, apart from the card, and] where on-line authorization of transactions is not required to access the funds. [Off-line stored-value accounts are subject to the requirements in paragraph (d) of this section.]
 - (2) On-line stored-value account means a balance of funds that may be accessed only through the use of a card that a consumer may use at electronic terminals to obtain cash or purchase goods or services, [where the record of such balance is maintained on a separate database, and not on the card, and] where online authorization of transactions is required to access the funds. On-line stored-value accounts are subject to the requirements in paragraph (e) of this section.
 - (3) Financial institution includes any person that, directly or indirectly, holds an on-line or off-line stored-value account, or that issues a card to a consumer for use in obtaining cash or purchasing goods or services by accessing such account.
- (c) [\$\frac{5100 exemption}{\text{exemptions}}\$. [A stored-value account, as defined in paragraph[s] (b)[(1) [and (2)] of this section, is exempt from the requirements of this part if the maximum amount that may be in the account at any given time is \$100 or less.] A stored-value account is exempt from the requirements of this part if:
 - (1) it is an off-line stored-value account as defined in paragraph (b)(1) of this section, in which case the provisions of section (d) below apply:
 - (2) it is an on-line stored-value account, as defined in paragraph (b)(2) of this section, and the maximum amount that may be in the account at any given time is less than [the de minimis amount], in which case the provisions of sections (d) and (e) below apply; or:
 - (3) it is an on-line stored-value account, as defined in paragraph (b)(2) of this section, with a value over [threshold amount] and the consumer and the financial institution have agreed in writing signed by both parties that the account is not governed by this part. In case (3), the provisions of section (d) below apply and the consumer and the financial institution may

^{273.} Proposal, 61 Fed. Reg. 19696, 19704-5.

^{274.} Comment Letter of Daniel W. Morton, supra note 81, at 11.

alternatively agree in writing signed by both parties that the account is governed by any or all specific provisions of this part.

- (d) Modified requirements for <u>certain</u> [off-line] stored-value <u>systems</u> [accounts]; initial disclosures. Stored-value accounts as defined in paragraph (b)(1) of this section are subject only to the following initial disclosure requirements of this part, as applicable:
 - (1) Liability of consumer. A summary of the consumer's liability, under state or other applicable law or agreement, for unauthorized transfers <u>and for lost or stolen cards.</u>²⁷⁵
 - (2) Types of transfers; limitations. The type of electronic fund transfers that the consumer may make and any limitations on the frequency and dollar amount of transfers.
 - (3) Fees. Any fees imposed by the financial institution for electronic fund transfers or for the right to make transfers.
 - (4) Error resolution. A summary of the financial institution's procedures for resolving errors concerning electronic fund transfers, including the telephone number and address of the person or office to be notified in the event of an error.]
- (e) Modified requirements for on-line stored-value accounts. Stored-value accounts as defined in paragraph (b)(2) of this section are subject to the requirements of this part, with the following modifications:
 - (1) Exceptions; change-in-terms notice; error resolution notice. The account is exempt from the requirements of § 205.8.
 - (2) Alternative to periodic statement. A financial institution need not furnish the periodic statement required by § 205.9(b) if the financial institution makes available to the consumer:
 - (i) The consumer's account balance, through a readily available telephone line and at a terminal; and
 - (ii) A written history of the consumer's account transactions that is provided promptly in response to an oral or written request and that covers at least 60 days preceding the date of a request by the consumer.
 - (3) Additional modifications. A financial institution that does not furnish periodic statements, in accordance with paragraph (e)(2) of this section, shall comply with the following special rules:
 - (i) *Initial disclosures*. The financial institution shall modify the disclosures under § 205.7 by disclosing:
 - (A) Account balance. The means by which the consumer may obtain information concerning the account balance, including a telephone number. This disclosure may be made by providing a notice substantially similar to the notice in paragraph A-5 of

Appendix A of this part.

(B) Written account history. A summary of the comsumer's right to receive a written account history upon request, in place of the periodic-statement disclosure required by section 205.7(b)(6), and the telephone number to call to request an account history. This

^{275.} See Comment Letter of Marcia E. Heister, supra note 23, at 8 (suggesting, if applicable, "If this card is lost or stolen, you will lose the value remaining on the card."); Comment Letter of Nessa E. Feddis, supra note 12, at 12 (suggesting, if applicable, "a simple statement that if the card is lost or stolen it will not be replaced or refunded.").

- disclosure may be made by providing a notice substantially similar to the notice in paragraph A-6 of Appendix A of this part.
 - (C) Error resolution. A notice concerning error resolution that is substantially similar to the notice contained in paragraph A-6 of Appendix A of this part.
- (ii) Limitations on liability. For purposes of § 205.6(b)(3), regarding a 60-day period for reporting any unauthorized transfer that appears on a periodic statement, the 60-day period shall begin with the transmittal of a written account history provided to the consumer under paragraph (e)(2) of this section.
- (iii) Error resolution. The financial institution shall comply with the requirements of section 205.11 in response to an oral or written notice of an error from the consumer that is received no later than 60 days after the consumer obtains the written account history, under paragraph (e)(2) of this section, in which the error is first reflected.
- 5. Appendix A would be amended by adding an entry to the table of contents at the beginning of the appendix and by adding a new paragraph A-6, to read as follows:

Appendix A to Part 205-Model Disclosure Clauses and Forms

Table of Contents

* * * * * * * * * *

A-6-Model Forms for On-Line Stored-Value Card Services (§ 205.16(e)(3))

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A-6-- Model Forms for On-Line Stored-Value Card Services (§ 205.16(e)(3))

(1) Disclosure of information about obtaining account balances and account histories in on-line stored-value card service (§ 205.16(e)(3)(i)(A) and

(B))

You may find out about the balance remaining on your card by calling [telephone number]. You can also learn your remaining balance [by making a balance inquiry at an ATM] [on the receipt you get when withdrawing cash from an ATM] [on the receipt you get when making a purchase].

You also have the right to get a written summary of transactions made with your card for the 60 days preceding your request by calling [telephone number].

(2) Disclosure of error resolution procedures in on-line stored-value card service (§ 205.16(e)(3)(i)(C))

In Case of Errors or Questions About Your Card Transactions
Telephone us at [telephone number] or Write us at [addresss] as soon as you can,
if you think an error has occurred involving a transaction made with your card. We
must hear from you no later than 60 days after you receive a written summary of

transactions (which you can request from us), showing the error. You will need to tell us:

- · Your name and card number.
- Why you believe there is an error, and the dollar amount involved.
- Approximately when the error took place.

If you tell us orally, we may require that you send us your complaint or question in writing within 10 business days. We will generally complete our investigation within 10 business days and correct any error promptly. In some cases, an investigation may take longer, but you will have the use of the funds in question after the 10 business days. However, 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 credit the funds in question back to the card during the investigation.

If we decide that there was no error, we will send you a written explanation within three business days after we finish our investigation. You may ask for copies of the documents that we used in our investigation.

If you need more information about our error resolution procedures, call us at [telephone number] [the telephone number shown above].

CHART I LEGAL FEATURES OF DIFFERENT METHODS OF PAYMENT

Traveller's Checks Debit Cards & Money Orders	By contract, consumer Generally, \$50. Up to \$500 protected for entire if fail to notify of loss or teff within 2 business days. Unlimited for losses that institution would not have incurred but for consumer's failure to notify institution within 60 days of statement containing transaction.	Consumer's claim On card issuer. presumed valid. (Regulation E)	None. None.
Credit Cards	Except for first \$50, no liability for unauthorized transactions. (Regulation Z)	On card issuer. (Regulation Z)	If consumer makes good faith effort to resolve disagreement, transaction is greater than \$50 and made in same state as cardholder or within 50 miles, cardholder is subject to all claims and defenses arising out of transaction. (Geographic requirements do not apply when card issuer is related to person
Checks	With some exceptions, consumer not responsible if no authorized signature or endorsements.	Varies depending on point at issue. UCC provides that if validity of signature is denied, burden of proof is on person claiming that signature is valid. UCC describes situations where burden of proof shifts in ease where failure exercise ordinary care is at issue.	Consumer may stop payment if order reasonably identifies the check and it is received by the bank in a timely manner. (UCC)
Cash	Consumer protection None. if lost, stolen, or used without authorization	Burden of proof Not applicable.	Special rights if None. dispute with merchant ,

Consumer or person other than consumer with actual authority initiates transfer. Includes person who was furnished with access device by consumer unless consumer has notified the card issuer that the person no longer has authority. (Regulation 2)	Account statement required for any month or shorter cycle if electronic fund transfer made during cycle period, but at least quarterly if electronic flund transfers may be made. (Regulation E)	Records available: amount; date; cardholder; merchant; itemization of purchases (possibly)	Cards may only be issued upon consumer's request. (Regulation E)
Consumer signs check. Signature compared with signature written on check at time of purchase.	None.	None.	Any consumer may purchase checks from issuer.
Consumer uses card or person other than card-holder who has actual, implied, or apparent authority (as determined by state law) uses card. (Regulation Z)	Account statement required: None, previous balance; identity of transactions; credits; periodic rates; balance on which finance charge computed; amount of finance charge; APR; other charges; closing date of billing cycle; new balance; free-ride period; address for notice of billing errors. (Regulation Z) Receipts provided as industry practice.	Records available: amount; date; cardholder; merchant; itemization of purchases (possibly)	Cards may not be sent unsolicited. (Regulation Z)
Consumer signs check or draft. (UCC)	Customer's duty to discover unauthorized transactions only triggered when bank sends or makes available to the customer a statement of account. (UCC)	Records available: amount; date; issuer; payee (may not be available if truncation used).	As practice, checks only provided when consumer opens or holds account.
Cash transferred.	Courtesy receipt from merchant or memory.	None required except for amount over \$10,000. (Bank Secrecy Act)	Not applicable.
Means for consumer to authorize transaction.	Means for consumer to to review transactions	Records of transactions	Access device issuance

After Nessa Feddis, American Bankers Association chart, in ELECTRONIC BANKING DEVELOPMENTS: THE CONSUMER PERSPECTIVE ON STORED VALUE CARDS (program materials for American Bar Assocation Section of Business Law 1996 Spring Meeting).

CHARL 1 FEDERAL RESERVE BOARD'S PROPOSED CLASSIFICATION OF STORED VALUE CARD SYSTEMS

Proposed Exemption from Regulation E		Exempt from all Regulation E requirements	Exempt from all Regulation E provisions except initial disclosures of information that "appears to be relevant."		Exempt from all Regulation E requirements	Exempt from all Regulation E requirements		Exempt from all Regulation E requirements	Subject to Regulation E except account balance and transaction history may be provided instead of periodic statements; change-in-terms notices and annual reminders of error resolution procedures would not be required.
Authorization Required for Card Use	% V			8			Yes		
Financial Information Maintained on Card	Yes			Yes			No		
Financial Information Maintained in Database	Yes	0	_	le No	0		Yes	0	
Type of Stored-Value Financial Information System Maintained in Database	Off-Line Accountable	with maximum of \$100	with maximum >\$100	Off-Line Unaccountable	with maximum of \$100	with maximum > \$100	On-Line	with maximum of \$100	with maximum > \$100

After Letter from Janice Shields, Consumer Research Director, U.S. Public Interest Research Group, to William W. Wiles, Secretary, Board of Governors, Federal Reserve System 2, 4 (August 6, 1996) and Letter from Ruth Susswein, Executive Director, Bankcard Holders of America, to Mr. Wiles 2, 4 (August 6, 1996).

CHART 3
FEDERAL RESERVE BOARD PROPOSAL REGARDING
DISCLOSURES TO BE MADE IN CONJUNCTION WITH
DIFFERENT TYPES OF STORED VALUE SYSTEMS

	Regulatory Reference	Off-Line Unaccountable	Off-Line Accountable (max ≤ \$100)	Off-Line Accountable (max > \$100)	On-Line Accountable (max ≤ \$100)	On-Line Accountable (max > \$100)
Disclosures to be made at time of contracting for electronic fund transfer service or before first electronic transfer is made involving: consumer's account.						
Consumer's liability for unauthorized transfers	12 C.F.R. § 205.7(b)(1)	S.	ž	Yes	8	Yes
Telephone number and address of institution	§ 205.7(b)(2)a	°Z	ž	Yes	8	Yes
Institution's business days	§ 205.7(b)(3)	Š	Š	Yes	N _o	Yes
Limitations on frequency and amount of transfers	§ 205.7(b)(4)	N _O	o Z	Yes	%	Yes
Fees	§ 205.7(b)(5)	Š.	N _o	Yes	No	Yes
Right to receipts and statements	§ 205.7(b)(6)	°Z	% V	Yes	%	Yes
Right to stop payment	§ 205.7(b)(7)	Š	SZ.	Yes	% N	Yes
Institution's liability for failure to stop payment	§ 205.7(b)(8)	No.	°Z	Yes	%	Yes
Confidentiality	§ 205.7(b)(9)	No No	N _o	Yes	No No	Yes
Error resolution	§ 205.7(b)(10)	No	No	Yes	S.	Yes

Information to be included in receipt made available to consumer at time that she initiates transaction

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1	7	7	•	1

STORED VALUE CARD SYSTEMS

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• - When card is designed to be reloadable or to be quickly exhausted and discarded, issuer may make this information available only upon request.

CHART 4 SUGGESTED REVISIONS TO FEDERAL RESERVE BOARD'S PROPOSED CLASSIFICATION OF STORED VALUE CARD SYSTEMS

Suggested Revisions to Board's Proposal	[All off-line systems	reaco ure sance- as exempt from Reg E requirements**}		[All off-line systems	as exempt from Reg E requirements**]		Exempt from all Reg E requirements** (max < \$DM)	Subject to Reg E except for some disclosures** (\$DM < max)	,
Board's Proposed Exemption from Regulation E.	Exempt from all Reg E requirements	Exempt from all Reg E provisions except initial disclosures of information that "appears to be relevant."		Exempt from all Reg E requirements	Exempt from all Reg E requirements		Exempt from all Reg Erequirements	Subject to Reg E except for some disclosures** (as in previous chart)	
Authorization Required for <u>Card Use</u> No	Exe	Exe disc ap	No No	Exe	Exc	Yes	Exc	Sul for (as	
Financial Data Maintained on <u>Card</u> Yes			Yes			No			
Financial Data Maintained in <u>Database</u> Yes			No S			Yes			
Type of Stored-Value F System B	with maximum of \$100	with maximum >\$100	Off-Line Unaccountable	with maximum of \$100	with maximum > \$100	On-Line	with maximum of \$100	with maximum > \$100	

Subject to negotiation/contract between parties** (initial value > ST > SDM)

After Letter from Janice Shields, Consumer Research Director, U.S. Public Interest Research Group, to William W. Wiles, Secretary, Board of Governors, Federal Reserve System 2, 4 (August 6, 1996) and Letter from Ruth Susswein, Executive Director, Bankcard Holders of America, to Mr. Wiles 2, 4 (August 6, 1996). **- some modified minimum disclosures will be required

\$DM = De Minimis Amount **\$T** = Threshold Amount CHART S
SUGGESTED REVISIONS TO
FEDERAL RESERVE BOARD PROPOSAL REGARDING
DISCLOSURES TO BE MADE IN CONJUNCTION WITH
DIFFERENT TYPES OF STORED VALUE SYSTEMS

	Regulatory Reference	Off-Line Off-Line Unaccountable Accountable (max ≤ \$100	Off-Line Accountable (max ≤ \$100)		Off-Line On-Line Accountable (max > \$100) (max ≤ \$DM*)	On-Line (\$DM < max)	On-Line (initial value >T* > \$DM)
Disclosures to be made at time of contracting for electronic fund transfer service or before first electronic transfer is made involving consumer's account.	[ALL OFF-LINI	[ALL OFF-LINE SYSTEMS NOW TREATED THE SAME]	w treated	THE SAME]			
Consumer's liability for unauthorized transfers	12 C.F.R. § 205.7(b)(1)	No Yes	₩ Yes	Yes	No Yes	Yes	Yes
Telephone number and address of institution	§ 205.7(b)(2)a	₩ Yes	No Yes	Yes	No Yes	Yes	Yes
Institution's business days	§ 205.7(b)(3)	No Yes	No Yes	Yes	No Yes	Yes	Yes
Limitations on frequency and amount of transfers	§ 205.7(b)(4)	No Yes	₩ Yes	Yes	No Yes	Yes	Yes
Fees	§ 205.7(b)(5)	No Yes	No Yes	Yes	No Yes	Yes	Yes
Right to receipts and statements	§ 205.7(b)(6)	No Yes	No Yes	Yes	No Yes	Yes	Yes
Right to stop payment	§ 205.7(b)(7)	₩ Yes	No Yes	Yes	No Yes	Yes	Yes
Institution's liability for failure to stop payment	§ 205.7(b)(8)	No Yes	No Yes	Yes	No Yes	Yes	Yes
Confidentiality	§ 205.7(b)(9)	No Yes	No Yes	Yes	No Yes	Yes	Yes
Error resolution	§ 205.7(b)(10)	No Yes	No Yes	Yes	No Yes	Yes	Yes
Information to be included in receipt made available to consumer at time that she initiates transaction at an electronic terminal.							
Amount of transfer and (if any)	y) § 205.9(a)(1)	N _o	No No	¥cs No	8	Yes	*

transaction fee							
Date of initiation of transfer	§ 205.9(a)(2)	&	%	Yes No	No	Yes	#
Type of transfer and of account(s) involved	§ 205.9(a)(3)	No 0	No No	Yes No	No No	Yes	:
Identification of consumer's account(s)	§ 205.9(a)(4)	No O	% S	Yes No	No No	Yes	:
Terminal location	§ 205.9(a)(5)	No.	S.	Yes No	% 9	Yes	:
Name of third party involved	§ 205.9(a)(6)	No	%	Yes No	No	Yes	:
Information to be included in periodic statements supplied by institution to consumer.							
Amount of transfers made	§ 205.9(b)(1)(i)	No	%	No	% %	Yes•	*
Date transfers were credited or debited to consumer's account	§ 205.9(b)(1)(ii)	No V	No.	%	No	Yes*	:
Type of transfer and account(s) involved	§ 205.9(b)(1)(iii)	No No	Š.	S.	No	Yes*	#
Terminal location	§ 205.9(b)(1)(iv)	S _o	8	Š	No	Yes*	:
Name of third party involved	§ 205.9(b)(1)(v)	% %	ž	N _o	No	Yes*	
Number of consumer's account	§ 205.9(b)(2)	% %	%	S _o	No	Yes*	*
Fees assessed	§ 205.9(b)(3)	No V	% %	S _O	No	Yes*	:
Account balances at beginning and end of statement period	§ 205.9(b)(4)	8 8	No V	No	No	Yes*	*
Address and telephone number for inquiries	§ 205.9(b)(5)	S S	ž	N _o	No	Yes*	:
Telephone number for preauthorized transfers	§ 205.9(b)(6)	No	N _o	No 0	No O	Yes*	:

* - When card is designed to be reloadable or to be quickly exhausted and discarded, issuer may make this information available only upon request.

DM* = De Minimis Amount

T* = Threshold Amount

** = subject to negotiation/contractual arrangement between parties