Appendix 1

Electronic money rules of commerce

One area of government interest is whether existing laws and regulations applicable to electronic money systems are adequate to protect the public interest. This section of the paper reviews current rules in two areas: 1) transactional rules that determine the rights and responsibilities of parties in electronic money transactions; and 2) disclosure rules that determine what information must be provided to consumers of electronic money services.

A. Transactional rules

The electronic money systems ultimately will need clear transactional rules governing electronic payments. Today, the transactional rules applicable to electronic debit systems are more established and certain than those for electronic cash systems.

1. Transactional rules: electronic debit

The two main domestic sources of transactional rules governing electronic debit transactions are Article 4A of the Uniform Commercial Code and the Electronic Fund Transfer Act (the EFTA). Article 4A generally applies to wholesale transactions; the EFTA applies to consumer transactions.

Article 4A provides reasonably complete transactional rules for what are commonly called wholesale wire transfers. These are generally large dollar volume transactions between businesses or financial institutions using the Fedwire or CHIPS, but they can also include wholesale payments by an automated clearing house. Transactional rules are also provided by the rules of the particular transfer systems: transfers made by Fedwire are governed by Federal Reserve Regulation J, transfers over CHIPS are governed by the CHIPS rules, and transfers by automated clearing houses are governed by the uniform rules adopted by the associated banks and by Federal Reserve rules and operating circulars. Most of these rules, including Article 4A, can be modified by agreement among the participants. Aggregated, these systems of rules (as modified and supplemented by the contracts of participants) provide a fairly comprehensive body of law that defines the rights and responsibilities of parties that engage in wholesale electronic debit transactions.

A different set of rules applies to consumer transactions. By its express terms, Article
4A does not apply to any transaction covered in any part by the EFTA. The EFTA covers a variety of electronic funds transfers involving consumers; it does not apply to transactions that do not involve a consumer’s account. The EFTA and its implementing regulation, Federal Reserve Regulation E, establish rights, liabilities, and responsibilities of participants in electronic fund transfer (EFT) systems. Under the EFTA, consumer liability for unauthorized use of a lost or stolen access device is generally limited to between $50 and $500. The EFTA also provides procedures for resolving errors and disputes involving EFT services. For example, providers are required to investigate and respond to consumer complaints within 10 days (or longer, if the provider provisionally recredits the consumer’s account in the amount of the alleged error pending further investigation). Finally, the EFTA makes the covered provider of EFT services generally liable to the consumer for all damages caused by the failure to make a correct and timely transfer of funds.

The full range of EFTA and Regulation E consumer protections apply to consumer electronic debit transactions by any bank or nonbank that either holds a consumer’s account or issues an access device and provides the consumer EFT services. Thus, the EFTA supplies fairly specific protections for consumers that engage in electronic debit transactions. Further, unlike the rules applicable to wholesale transactions, these consumer rights cannot be abrogated by contract.

2. Transactional rules: electronic cash

Article 4A and the current version of Regulation E probably do not apply to many types of electronic cash systems. The rules for these systems are likely to be determined by contract, by Articles 3 and 4 of the UCC (to the extent the courts determine that those principles of commercial law apply to these transactions), and by common law. By its terms, Article 4A applies only to “payment orders,” which are “instructions to a . . . bank . . . to pay . . . money to a beneficiary.” Article 4A could be held not to apply to transactions involving most electronic cash systems because, unlike electronic debits, many electronic cash transactions involve no payment instructions to a bank; the transfer of electronic cash value from payor to payee can occur without the involvement of any bank and the user of electronic cash does not instruct a bank to pay a beneficiary. Similarly, electronic cash transactions may not involve any of the existing wire transfer systems or automated clearing houses and, thus, would not be subject to the transactional rules applicable to those systems.

Regulation E would apply to the electronic withdrawal of funds from a deposit account to load electronic cash onto a storage device. In other words, consumers would be covered by the current Regulation E when they use a “load value machine” to transfer funds from a deposit checking account to a stored value card, but not when they “spend” the E-cash by transferring it from a stored value card to a merchant storage
device.  

In short, currently, no body of transactional rules comprehensively defines the rights and obligations arising from electronic cash transactions. The gaps might be filled by contracts between the parties or by principles of law applicable to other payments systems that might apply by analogy. The rights and obligations of parties regarding risk allocation in electronic cash transactions thus may vary with the system at issue. The significance of that uncertainty to the development of electronic cash systems will depend upon the degree to which the systems can successfully reduce risk by design and allocate risk by agreement.

For example, no current federal law or regulation expressly provides a consumer with a right to recover the value on a lost or stolen stored value card and, accordingly, consumers will bear those losses unless their contract with the card issuer covers that risk. The risk that funds placed on a stored value device may be lost because of malfunction, fraud, or loss of the device will depend on the design of the particular system.

Competitive pressures may motivate electronic cash systems to reduce the risks to consumers. Electronic cash providers will have a significant competitive incentive to provide a high degree of reliability. Nevertheless, systems may feature tradeoffs between risk protections and other attributes such as convenience and privacy. For example, competition may affect whether systems provide transaction auditability or limits on the amount of electronic cash that can be stored on a card, since consumers may not demand these attributes.

Bank and nonbank participants in electronic cash systems may be able to negotiate the transactional rules they will apply inter se as they have done in other payment systems. Similarly, the allocation of risk to merchants via transactional rules has traditionally been accomplished by agreement between the merchant and the payment network. This trend would likely continue in electronic cash because of the need to attract merchants to participate in the system. Thus, the allocation of risk to merchants is likely to be a matter of contract law.

3. Transactional rules: Conclusions

In sum, the transactional rules for electronic debit systems seem to be sufficiently certain that little additional clarification is needed. However, the current body of transactional law may need to be modernized if parties to electronic cash transactions are unable to develop an adequate system of rules in their private contracts. The

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39 The Federal Reserve has proposed an amendment to Regulation E that would provide limited coverage of stored value card systems. 86 Fed. Reg. 19696 (May 2, 1996).
development of those rules will influence the acceptability of electronic cash as a means of payment, and the public may have the expectation that it will be protected. Therefore, an important issue is whether or not the federal government should act to make the rules in this area clear and uniform. Since merchants and banks will be in a better position to negotiate such rules than will consumers, the government interest may be greater at the consumer level.

B. Disclosure rules

The application of the legal regimes governing disclosure is relatively clear with respect to electronic debit systems, but not with respect to electronic cash. If electronic cash systems are to succeed, potential participants must attain a threshold of confidence in the system. That confidence might be increased by the availability of basic information pertaining to the nature of the electronic instrument they are purchasing, the soundness of the issuer and redeemer of that instrument, and the rights and obligations regarding it. However, the rules that determine the extent and accuracy of these disclosures are uncertain. There are several sources of disclosure rules that are potentially applicable to electronic money systems—most notably, the EFTA, state law, and 12 U.S.C. 1831t.

1. EFTA

Under Regulation E, banks and others offering EFT services subject to the EFTA must provide extensive disclosures to consumers. They are required to provide consumers with initial disclosures covering: consumer liability for unauthorized use of an access device, procedures for reporting a suspected unauthorized transfer, any limitations on the type and frequency of transfers, the amount of charges for transfers, the consumer’s right to detailed documentation of transfers, the consumer’s right to stop payment on preauthorized transfers, the circumstances under which the bank will disclose information on the consumer's account to third parties, and a summary of the error resolution procedures. Additionally, banks are required to provide consumers with a documentary record of EFT transactions both at the time the transfer is initiated at a terminal and in periodic account statements.

The current Regulation E probably applies to electronic debit systems, but not electronic cash systems. Thus, consumers are assured of receiving extensive disclosures in electronic debit systems, but not in electronic cash systems. However, the Federal Reserve Board has proposed an amendment to Regulation E to provide limited coverage of stored value cards. The proposal exempts from Regulation E stored value card systems that do not allow more than $100 to be loaded on the card at any one time. Moreover, even those systems that permit a maximum load of more than $100 are not

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covered if they are unaccountable, i.e., do not keep records of individual transactions conducted with the cards. Finally, even accountable systems that permit a maximum load of over $100 are covered only to the extent that consumers must receive initial disclosures requirements similar to those applicable to debit systems under Regulation E. At this time it is uncertain what the final amendment to Regulation E will look like.

2. 12 U.S.C. 1831t

If the issuance of electronic cash results in the receipt of “deposits,” nonbanks issuing electronic cash may be subject to the restrictions of 12 U.S.C. 1831t which imposes certain disclosure requirements on uninsured “depository institutions” accepting deposits. Specifically, each periodic statement, signature card, and instrument evidencing a “deposit” must contain a notice that the firm is not federally insured and that, if it fails, the federal government does not guarantee that depositors will get their money back. Similar statements must be conspicuously displayed in all advertising and at each place where “deposits” are normally received. New customers must sign an acknowledgment that they received this notification. The FTC, which is responsible for enforcing compliance with 12 U.S.C. 1831t, has not yet indicated how these requirements would apply to electronic cash systems that may use no physical instruments or offices.

3. Other disclosure requirements

Securities laws are a potential, although unlikely, source of disclosure requirements for electronic money systems. These laws impose extensive disclosure requirements (and concomitant liability) on persons issuing or selling “securities.” Unlike Regulation E, disclosures required under securities laws could extend to both consumer and nonconsumer purchasers of electronic cash.

The federal securities laws probably will not apply to electronic debit systems because most likely those systems will not be deemed to involve the issuance or sale of a “security.” Generally, a bank deposit account is not a “security” under the securities laws because such accounts are covered by a pervasive system of bank regulation and deposit insurance. Funds held in a bank account, though subject to transfer by electronic debit, will likely be held to be a “deposit” for purposes of the FDI Act.

Similarly, those laws probably do not apply to electronic cash systems because electronic cash is not likely to be found to be a “security” for purposes of securities

41 These requirements would also apply to uninsured banks or thrifts.

laws, since electronic cash provides no real possibility of gains or losses in value that are the hallmarks of a “security.”
Appendix 2

Anti-money laundering laws

Criminal activities can generate large amounts of funds that must be integrated into the financial system if the criminals are to enjoy the fruits of their crimes. Thus, a key strategy of modern law enforcement has been to “follow the money.” Historically, law enforcement and regulatory officials have relied upon the intermediation of banks and other types of financial institutions to provide data “chokepoints” through which funds must pass. By requiring that these institutions keep records and file reports on certain types of financial transactions (including, most importantly, suspicious transactions), law enforcement has been able to build a paper trail to deter and detect illicit activity and for criminal, tax, or regulatory investigations or proceedings. The Bank Secrecy Act (BSA) and its implementing regulations are the primary source of these requirements. 43

Electronic money systems raise issues for the effective implementation of the BSA in the future. If the electronic money systems are not covered by the BSA or BSA-type requirements, there is risk the new payments systems could be used to evade the BSA “chokepoints.” This appendix will discuss some of the issues raised by the application of the BSA to the new electronic payments systems and will focus on both electronic debit and electronic cash systems.

A. Overview of BSA Requirements.

The BSA requires that “banks” and other types of “financial institutions” such as broker dealers, casinos, check cashers and money transmitters, maintain records and file reports of certain transactions. The statute also authorizes the Treasury Department to require financial institutions to develop and implement comprehensive Anti-Money Laundering Programs, including the reporting of suspicious transactions which is the new focus.

The BSA has numerous reporting requirements. In general, financial institutions are required to file a report with the Treasury Department of currency transactions in excess of $10,000. In addition, persons must file a report if “currency” and certain other “monetary instruments” in excess of $10,000 are transported into or out of the U.S. Also, each person subject to the jurisdiction of the United States (except a foreign subsidiary of a U.S. person) having a financial interest in, or signature authority over a bank account, securities account, or other financial account in a foreign country must also file a report if the aggregate value of the account exceeds $10,000.

The BSA also contains recordkeeping requirements. A “financial institution” may not issue or sell certain “monetary instruments” of $3,000 or more in currency unless it obtains and records certain information about the purchaser. Financial institutions must also obtain and retain records on extensions of credit in excess of $10,000 and on each advice, request or instruction received or given with respect to transactions involving in excess of $10,000 to or from any person, account, or place outside the U.S. In addition, there are numerous other requirements specific to the type of financial institution that facilitate the reconstruction of financial transactions. Banks, for example, are required to maintain copies of: documents granting signature authority over accounts, statements and ledger cards, and checks and money orders for most transactions of $100 or more.

Recently, Treasury and the Federal Reserve Board jointly issued recordkeeping requirements governing funds transfers. Also, FinCEN is in the process of developing guidelines to assist financial institutions to implement Anti-Money Laundering Programs (AMLPs). One element to an effective AMLP is that financial institutions take adequate steps to ensure that all the relevant BSA recordkeeping and reporting requirements are met. A second element is to obtain and retain information on persons who enter into customer relationships. This includes specific information about the type of account and purpose, the verification of identity of persons opening accounts as well as the identification of any and all beneficiaries. A third element is that financial institutions monitor customer activity to identify activity that falls outside of what would be considered normal financial commerce and for which there is no apparent reasonable explanation. A final element is the timely identification of and reporting to law enforcement of such suspicious activity.44

B. Electronic Money Entities and Products Covered By BSA Requirements.

The application of the BSA requirements to electronic money systems will depend upon whether the entities and products involved in those systems fall within certain key definitions of the BSA. For example, the BSA contains definitions for terms such as “financial institutions,” “currency,” “monetary instruments,” and “funds transmittals.”45 The status of electronic money providers and products under those definitions is uncertain.

The BSA definition of “financial institution” includes banks, credit unions, broker dealers in securities, casinos, check cashiers and “licensed transmitters of funds, or other

44 Recently, FinCEN and all the federal financial regulatory agencies adopted regulations requiring depository institutions to report suspicious activities. See, e.g., 61 Fed. Reg. 4332.

45 See generally, 31 C.F.R. 103.11.
persons engaged in the business of transmitting funds.” As noted in Appendix 3 of this report, only institutions authorized to accept deposits will be able to operate electronic debit systems. Thus, electronic debit systems are likely to involve entities that would be “financial institutions” under the BSA. As also noted in Appendix 3, nondepository institutions may be permitted to operate electronic cash systems. Some of these entities may fall outside the existing BSA definition of “financial institutions.” The term “financial institution” includes “an issuer, seller, or redeemer of traveler's checks.” If electronic cash is deemed to be the electronic equivalent of traveler’s checks, issuers would be covered. However, this is not certain.

The BSA defines currency as “coin and paper money of the United States or of any other country that is designated as legal tender and that circulates and is customarily used and accepted as a medium of exchange in the country of issuance.” It is uncertain whether either electronic debt or electronic cash products fall within this definition.

The BSA defines monetary instruments as “currency, traveler’s checks, all negotiable instruments (including personal checks, business checks, official bank checks, third party checks, promissory notes, and money orders), incomplete instruments signed but with the payee’s name omitted, and securities or stock in bearer form.” The status of electronic money payment systems under this definition also is not clear. Electronic debit products could be said to be a form of electronic check or negotiable instrument. Similarly, as previously noted, it is possible that electronic cash products could be an electronic form of “travelers checks.” Thus, it is possible, but not certain, that electronic money products are incorporated into the existing definition of monetary instruments.

In any event, to the extent that consumer electronic debit or cash transactions are governed by the BSA, the nature of emerging systems—which rely upon encryption technology to ensure security—may present a unique new challenge to the ability of financial institutions to comply with the BSA’s recordkeeping and reporting requirements.

46 31 C.F.R. 103.11(n)(4).
47 31 C.F.R. 103.11(n)(4).
48 The FDIC in its recent General Counsel opinion No. 8 concluded that electronic cash was not a “travelers check” for purposes of Federal Deposit Insurance coverage.
49 31 C.F.R. 103.11(h).
50 31 C.F.R. 103.11(u).
Finally, the application of the new FinCEN rules on funds transfers to the electronic money products may well depend on the nature of the product. The term “funds transfer” is defined as “the series of transactions, beginning with the originator's payment order, made for the purpose of making payment to the beneficiary of the order.” Electronic debit payments seem to resemble traditional funds transfers and may be covered under newly issued BSA wire transfer record keeping rules. However, it is questionable whether electronic cash systems involve the issuance of a “payment order” as defined in the regulation. Consumer electronic debit and electronic cash transactions governed by the EFTA are not covered by the funds transfer rules.

51 31 C.F.R. 103.11(q).
52 31 C.F.R. 103.11(y).
53 31 C.F.R. 103.11(q). On the coverage of the EFTA, see Appendix 1.
Appendix 3

Standards for entry into electronic money business

Two different sets of laws control what types\(^{54}\) of firms can offer forms of electronic money: laws that restrict the issuance of currency and laws that restrict the acceptance of deposits. If electronic cash is held to be the issuance of currency or the acceptance of deposits, laws that restrict the types of firms that can engage in those activities will control which firms can offer electronic cash services. Similarly, to be able to offer electronic debit services, a firm must be able to accept deposits; laws that restrict the types of firms that can accept deposits will arguably control which firms can offer electronic debit services. Both types of laws will be discussed below.\(^{55}\)

A. Restrictions on the Issuance of “Currency” and “Legal Tender”

The issuance of paper currency and coinage as legal tender is governed by the Constitution, federal statutes, and state statutes. “Currency” is generally understood to mean money in use as a medium of exchange. Legal tender is currency a government declares to be good and sufficient payment of public and private debts. The Constitution gives Congress the sole authority to coin money that serves as legal tender. U.S. Constitution, Art. 1, Sec. 8. Federal statutes declare that only U.S. coins and currency are legal tender,\(^{56}\) but parties are free to voluntarily accept other forms of payment in lieu of legal tender.

\(^{54}\) Some federal and state laws regulate nonbank money transmitters, but do not restrict the types of firms that can engage in the business. See, e.g., 18 U.S.C. 1960 (prohibiting illegal money transmitters) and 31 U.S.C. 5330 (registering money transmitters). Rather, the laws seek to license and, in varying degrees, regulate those firms. These laws will be discussed in Appendix 4.

\(^{55}\) Aside from direct prohibitions, the law can significantly affect which types of firms will enter or succeed in the electronic money markets if the law imposes different regulatory costs or burdens on different types of firms.

A number of federal criminal statutes prohibit counterfeiting of U.S. paper currency and coinage by private parties.\textsuperscript{57} However, since these are criminal statutes, they are construed narrowly; and thus, may not apply to either electronic debit or electronic cash systems.

Federal criminal law also restricts the issuance of obligations intended to circulate as money or to be used in lieu of lawful money;\textsuperscript{58} this restriction applies equally to banks and nonbanks. However, restrictions on the issuance of currency do not apply to electronic debit systems since those systems involve the transfer, rather than issuance, of currency. On the other hand, the application of these laws to electronic cash is less certain since in some electronic cash systems the electronic value is intended to circulate as a cash equivalent or substitute. An argument can be made that, construed narrowly, 18 U.S.C. 336 does not prohibit private firms from issuing electronic cash. Consequently, firms developing electronic cash systems may not be deterred by this statute. The Department of Justice is the only agency that can give a definitive interpretation of criminal statutes, including 18 U.S.C. 336. Government clarification on the application of this federal law may become desirable as electronic cash systems evolve and expand.

Some states have issued laws that appear to prohibit the issuance of currency by banks and nonbanks. The Constitution and federal statutes are silent on the issue of whether states can prohibit currency that is not legal tender.

Some state laws that attempt to prohibit the issuance of currency could be preempted by the National Bank Act or by the dormant Commerce Clause of the U.S. Constitution. If the issuance of electronic cash were found to be a permissible activity for national banks under the National Bank Act, state prohibitions (and state regulations that operate as prohibitions) would be preempted with respect to national banks. Even in the absence of federal legislation, the dormant Commerce Clause preempts state laws that create insurmountable barriers to interstate commerce. Any state regulation frustrating the creation of a nationwide electronic cash system would be subject to potential preemption under that clause.

\textsuperscript{57} See Chapter 25, Title 18, United States Code.

\textsuperscript{58} 18 U.S.C. 336 provides: “Whoever makes, issues, circulates, or pays out any note, check, memorandum, token, or other obligation for a sum of less than \$1, intended to circulate as money or to be received or used in lieu of lawful money of the United States” is subject to a fine and imprisonment.
B. Restrictions on Which Entities Can Take Deposits

Laws that restrict the acceptance of deposits will have an impact on which firms can offer electronic debit services and may control which firms can offer electronic cash services. One such law is Section 21 of the Glass Steagall Act, which makes it unlawful for any person engaged in the business of issuing securities from also being in the business of accepting deposits. Section 21 also prohibits nonbanks from accepting deposits. Many states also have laws prohibiting nonbanks from receiving deposits.

Section 21 of the Glass Steagall Act generally would not affect the ability of banks to offer electronic debit services because banks are not engaged in the business of issuing, underwriting, selling, or distributing “securities.” In contrast, since nonbanks are prohibited by Section 21 from receiving deposits, they cannot engage in the business of electronic debit services that involve the holding of deposits. However, nonbanking firms can (and do) offer electronic debit services that use accounts held by banks, e.g., the CheckFree bill-paying service.

Similarly, it is unlikely that Section 21 would affect the ability of banks to offer electronic cash services. A bank that issues or sells electronic cash is probably not engaged in the business of issuing, underwriting, selling, or distributing “securities” within the meaning of Section 21 of the Glass Steagall Act. While the term “securities” is not defined in the Glass-Steagall Act, bank-issued instruments like certificates of deposit have not been characterized as “securities” for purposes of Sections 16 and 21 of the Glass Steagall Act. Moreover, if (as is likely) the issuance of electronic cash is

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59 Specifically, the statute prohibits any organization “engaged in the business of issuing, underwriting, selling, or distributing securities” to engage at the same time to any extent whatever in “the business of receiving deposits subject to check or to repayment upon presentation of a passbook, certificate of deposit, or other evidence of debt, or upon request of the depositor.” 12 U.S.C. 378(a)(1).

60 Specifically, the statute makes it unlawful for “any organization, to any extent whatever, to receive deposits subject to check or to repayment upon presentation of a passbook, certificate of deposit, or other evidence of debt, or upon request of the depositor, other than from officers or employees,” unless the organization is chartered or regulated as a bank. 12 U.S.C. 378(a)(2).

61 Most States have laws prohibiting nonbanks from engaging in the business of banking. For many states, the critical activity that defines “banking” is acceptance of deposits. See, e.g., Cal. Fin. Code Section 102. If these states found that issuing electronic cash was the acceptance of deposits, state law could be a major impediment to nonbank electronic cash activities.

part of the “business of banking,” and thus permissible for national banks, the activity should not be prohibited for national banks under Section 21.\textsuperscript{63}

There is greater uncertainty about the effect of Section 21 on nonbanks that would engage in electronic money activities. It is uncertain whether, under Section 21, an organization that issues electronic cash is thereby engaged in “the business of receiving deposits subject to check or to repayment upon presentation of a passbook, certificate of deposit, or other evidence of debt, or upon request of the depositor.” Moreover, it is unclear whether a nonbank that sells or issues electronic cash in exchange for real cash is thereby engaged in “the business of receiving deposits subject to check or to repayment upon presentation of a passbook, certificate of deposit, or other evidence of debt, or upon request of the depositor.” If the sale or issuance of electronic cash results in a “deposit,” then only banks may engage in the sale or issuance of electronic cash.

The government has not definitively opined on these issues.\textsuperscript{64} Since the statutes involved are criminal, the regulatory agencies must defer to the Department of Justice and are reluctant to issue interpretive opinions. As criminal statutes, the laws would be narrowly construed. Uncertainty over the application of the Glass Steagall Act has not, so far, appeared to have chilled the development of electronic cash services.

The Bank Holding Company Act (BHCA), 12 U.S.C. 1841 et seq., also indirectly imposes restrictions on the types of entities that can accept “deposits.” The BHCA, which is administered by the Board of Governors of the Federal Reserve System (Federal Reserve), essentially prohibits any company from owning a “bank” if the parent company is engaged in activities that are not “closely related to banking” and a “proper incident thereto.” Thus, if the Federal Reserve deemed a company issuing electronic cash to be a “bank” under the BHCA, the statute would severely limit the permissible activities of any firm that owned that company. This would effectively

\textsuperscript{63} Securities Industry Ass’n v. Clarke, 885 F.2d 1034, 1049 (2d Cir. 1989), cert. denied, 493 U.S. 1070 (1990).

\textsuperscript{64} In 1979, Department of Justice staff issued a letter opining the money market mutual funds offered by brokerage firms were not “deposits” for purposes of Section 21 of the Glass Steagall Act. See Justice Department opinion letter from Philip B. Heymann and Lawrence Lippe to Martin Lybeck (Dec. 18, 1979). That letter recognized a critical distinction between a “deposit” in which the holder was a creditor and an investment in which the purchaser was an owner. The letter said: “It is patent from the quoted statutory language that a depositor is only a creditor of his depository .... It is equally patent that one who invests in a money market fund is an owner pro tanto of the fund.” However, it is not certain how this precedent would be applied to electronic cash. In most proposed electronic cash systems, the holder of the electronic cash is arguably more like a creditor of the issuer than the owner of an investment. Thus, the money market fund ruling is arguably distinguishable.
preclude most nonbanking organizations from owning companies that issued electronic cash. 65

If the issuance of electronic cash is found to involve the acceptance of “deposits” under the BHCA, then to avoid any risk that the Federal Reserve would find electronic cash issuers to be “banks” under the BHCA, those electronic cash issuers owned by nonbanking organizations would have to avoid “engaging in the business of making commercial loans.” 66 These firms would be compelled to design their electronic cash systems to avoid any transaction with merchants or businesses that could be deemed a loan, such as issuing electronic cash to businesses on credit. Thus, the threat of the application of the BHCA could discourage nonbank electronic cash systems from using electronic cash to create “new” money by issuing electronic cash on credit. In other words, the threat could inhibit some nonbank electronic cash issuers from behaving, in at least one respect, like a bank.

Finally, under 12 U.S.C. 1831t, any nonbank that is determined by the FTC to be engaged in the business of receiving deposits or to be susceptible to being reasonably mistaken for a bank or thrift by its current or prospective customers is prohibited from using the devices of interstate commerce to “receive deposits” if it does not meet the eligibility requirements for FDIC insurance. If the issuance of electronic cash results in the receiving of “deposits” under some circumstances, nonbanks issuing electronic cash that could reasonably be mistaken for banks would seem to be subject to this restriction, which is administered by the Federal Trade Commission (FTC). 67

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65 The BHCA defines a “bank” to be, inter alia, an institution that “(I) accepts demand deposits that the depositor may withdraw by check or similar means for the payment to third parties or others; and (ii) is engaged in the business of making commercial loans.” The status of electronic cash as a “deposit” is not clear, but an expansive reading of “deposit” might encompass electronic cash. It is possible, although unlikely, that the Federal Reserve could find that electronic cash is a “demand deposit” subject to withdrawal for the payment of third parties.

66 The Supreme Court has held that the phrase includes only the making of direct loans to a business customer for the purpose of providing funds needed by the customer in its business. Board of Governors of the Federal Reserve v. Dimension Financial Corp., 474 U.S. 361 (1986).

67 However, because of a continuing legislative ban on using appropriated funds to implement this statute, the FTC has been unable to promulgate regulations or provide other guidance on this statute.
Appendix 4
Financial system risk oversight

A. Supervisory systems

Banks. Banks and bank holding companies are subject to an extensive regime of regulation and supervision designed to address their financial risks and exposures. This regime (which does not apply to nonbanks) has four basic components.\(^{68}\)

First, the FDIC insures the money of customers held in deposit accounts at insured banks (up to $100,000); customers that keep their account balances within those limits have no risk of loss from the failure of the deposit-holding bank. FDIC deposit insurance is limited to funds that are held as “deposits” in insured banks. Banks are assessed a premium by the FDIC based on the amount of their U.S. deposits.

FDIC insurance will cover customers’ funds held in an electronic debit bank deposit account. However, once the funds are withdrawn from the account, they become unprotected unless placed in some other insured deposit account. An FDIC legal opinion holds that electronic cash issued by banks will be insured if the funds underlying the electronic cash remain in a customer’s account until the value is transferred to a merchant or other third party, who in turn collects the funds from the customer’s bank.\(^{69}\)

Second, banks and bank holding companies are subject to an extensive framework of laws and regulations, generally designed to foster their safety and soundness. Banks and bank holding companies that fail to comply with laws or regulations (or that violate general standards of safe and sound banking practices) are subject to regulatory oversight.

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\(^{68}\) This section does not address the additional regime of customer protections that apply to the banking industry.

\(^{69}\) FDIC General Counsel’s Opinion No. 8, 61 Fed. Reg. 40490 (August 2, 1996). The opinion also indicates that bank-issued electronic cash does not result in an insured deposit when the proceed funds are placed in a reserve or general liability account held by the issuing bank to pay merchants and other payees as they make claims for payments. For bank-issued electronic cash deemed a deposit by the FDIC, issuing banks would be subject to an FDIC premium on their electronic cash, thus, potentially increasing their costs.
enforcement actions by the appropriate banking agency. These actions include cease and desist orders, civil money penalties, and removals of management.

While current laws and regulations may not address electronic money directly, those designed to provide prudential limits may apply to banks’ electronic money operations. For example, federal laws limit the amount of “loans” that banks may make to a single borrower and, thereby, protect banks from excessive concentrations of credit risk. Other federal laws impose restrictions on potentially harmful transactions (including loans) between banks and their affiliates. Banks holding electronic cash issued by third parties (banks or nonbanks) may be deemed to have made a “loan” to the issuer in the amount of the electronic cash. The lending limits would, thus, restrict the amount of such third party electronic cash that a bank could hold to 15 per cent of its capital, subject to certain exemptions. Similarly, if the holding of electronic cash is a “loan” under the affiliate restrictions and if the third-party issuer is an affiliate of the holding bank, the affiliate restrictions apply. These restrictions would limit the amount of affiliate electronic cash that the bank could hold and, more significantly, impose requirements as to quality, collateralization, and the payment of interest that may be difficult or costly for the bank to meet.

Third, banks and bank holding companies are subject to banking agency supervision through mandatory reports and regularly scheduled, on-site examinations. This oversight focuses not only upon compliance with legal requirements, but also on norms of safe and sound banking. The examination process permits close supervision; the banking agencies consult with bank management on the condition and operations of a bank to help assure its safety and soundness. Banks are assessed fees by their chartering authority to cover the costs of the agency monitoring systems.

The bank supervisory regime would apply to banks offering electronic debit or electronic cash services. Such banks are examined and supervised to ensure that their electronic money operations do not violate applicable laws or regulations and the norms of safety and soundness. Any bank found to be in violation is subject to an enforcement action brought by the appropriate banking agency.

Fourth, insolvency for banks is determined under the law of the chartering authority and under the federal laws requiring prompt corrective action. Such federal laws ensure that insured banks usually are placed into receivership before their equity capital falls below 2 percent of assets. Receiverships for insured banks are conducted under the Federal Deposit Insurance Act (FDI Act) and are administered by the FDIC. The receivership rules under the FDI Act are generally designed to minimize losses for insured depositors (and for the FDIC).
Nonbanks. Nonbanks offering electronic cash not connected with any bank are not subject to the bank supervisory regime. Similarly, nonbanks are not subject to any of the statutory prudential limits that apply to banks.

Nonbanks connected with banks are subject to varying degrees oversight by the banking regulators depending upon the connection. If a nonbank is owned by a bank holding company, it is subject to examination and supervision by the Federal Reserve Board. Nonbanks that are the operating subsidiaries of banks are subject to examination and supervision by the parent bank’s primary regulator. Where nonbanks provide certain services for a bank that might support electronic banking services, the performance of those services would be subject to regulation and examination by the bank regulatory agencies under the Bank Service Corporation Act. Finally, if a nonbank is controlled by banks, the bank regulators would, as a practical matter, be able to use their considerable leverage over the owner banks to influence the operation of the nonbank subsidiary. Bank-connected entities will also be subject to any regulatory scheme applicable to other nonbanks (described below) unless that regulatory scheme is displaced by the federal banking laws.

As noted, the FDIC has found that some, but not all, electronic cash issued by banks and held in stored value cards and other devices is a “deposit” covered by FDIC insurance. However, since only the obligations of banks can be insured by the FDIC, electronic cash issued by nonbanks will not be insured even if sold by banks; nonbanks issuing electronic cash will not incur the costs of any future increases in FDIC premiums.

Insolvency for nonbanks, whether or not they are affiliated with banks, is determined under the federal bankruptcy laws. There is no regulatory mechanism under those laws to ensure that nonbanks are placed into receivership before their equity capital is exhausted. The rules do not provide any preference to depositors or those standing in

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70 See FDIC General Counsel’s Opinion No. 8, supra.
their stead; rather, priority rules generally reflect contractual arrangements and rights to assets specified as collateral.\textsuperscript{71}

To the extent that their activities and products fall within the jurisdiction of these agencies, nonbanks could be subject to the regulatory authority of federal agencies with general responsibility to prevent securities fraud (the SEC) and deceptive practices (the FTC). It is unlikely that electronic cash would be deemed a “security” under the federal securities laws. The provisions in the Federal Trade Commission Act applying to consumer product warranties probably would not apply to electronic money because those services are not tangible products covered by the FTC Act’s provisions. However, the general authority of the FTC to act against deceptive practices affecting commerce would seem applicable to electronic banking services provided by nonbanks. Additionally, nonbanks issuing electronic cash may be subject to certain FTC enforced disclosure requirements under 12 U.S.C. 1831t.

Finally, nonbanks will be subject to oversight by the state attorneys general and the state agencies charged with consumer protection. Many states have laws that require the licensing of nonbank money transmitters. Federal law requires nonbank money transmitters to comply with such state licensing requirements.\textsuperscript{72} Many states also provide for some type of regulation and supervision of nonbank money transmitters; however, the nature and extent of this regulation varies considerably.\textsuperscript{73}

Moreover, it is not clear whether these state laws would apply to electronic cash systems.

B. Federal Reserve payments system oversight

\textsuperscript{71} The insolvency rules for nonbanks could also affect some users of nonbank electronic debit services. Some electronic debit transactions, particularly those involving home banking and electronic bill-paying services, use the services of a nonbank intermediary to effect transactions. Consumers contract directly with the intermediary for bill-paying services. Sometimes the bill-paying service will debit the consumer’s account before issuing the payment order against its own account. During that intervening time, the consumer is exposed to a credit risk vis-a-vis the bill-paying service. If the bill-paying service should become insolvent while holding consumer funds, consumer remedies would likely lie under the bankruptcy code.

\textsuperscript{72} 18 U.S.C. 1960.

\textsuperscript{73} See, e.g., Ezra Levine, The Regulation of Check Sellers and Money Transmitters, CIVIL REMEDIES IN DRUG ENFORCEMENT REPORT, March/April 1993. Section 407 of the Money Laundering Suppression Act of 1994, Title IV of the Riegle Community Development and Regulatory Improvement Act of 1994, Pub. L. 103-325 (September 23, 1994), expressed the sense of Congress that the states should establish uniform laws for licensing and regulating money transmitters, and directed the Treasury Department to conduct a study of the progress of the states in developing and enacting a model statute. Various efforts towards this end are now underway and the Treasury is to report to the Congress by September, 1997.
The Federal Reserve System is charged with important responsibilities regarding the U.S. payments system. The Fed is the largest provider of check clearing services, the largest provider of retail electronic payment clearing services through the automated clearing house (ACH), and the largest provider of wholesale electronic payments clearing services through Fedwire. While there are a number of private clearing arrangements such as the New York Clearing House Interbank Payments System (CHIPS), the Fed has exercised considerable influence over those bank-run entities. To the extent that electronic money transactions involve payments settled between banks, they would most likely be conducted through a mechanism under at least the partial purview of the Fed.

Depository institutions are required to maintain reserves in noninterest-bearing accounts at the appropriate Federal Reserve bank. This requirement is implemented by the Board’s Regulation D that applies to depository institutions listed in 12 C.F.R. 204.1 (which lists, among others, insured banks, thrifts and credit unions). The reserve system is also one device by which the Federal Reserve controls the money supply. Banks’ required reserves are determined by the amount of their transaction account “deposits.”

Reserve requirements may apply to electronic debit and electronic cash banking services offered by banks, depending on the nature of the activity and underlying account. Electronic debit services offered by banks will use an underlying demand deposit account that is subject to the reserve requirements. The status of electronic cash systems is less certain. The Federal Reserve has informally indicated that balances of bank-issued electronic cash on stored value devices would be treated as transaction account “deposits” subject to reserve requirements.\(^7^4\)

Reserve requirements, which are part of the Federal Reserve system of controls applicable only to the banking payment system, would not apply to nondepositary institutions issuing electronic cash. This may provide nonbanks with a cost advantage over banks that are subject to reserve requirements. It may also provide banks with a significant incentive to issue electronic cash through nonbank entities rather than doing so themselves.

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\(^7^4\) See Statement of Vice Chairman Alan S. Blinder before the Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services, U.S. House of Representatives (October 11, 1995) at p. 12.