

## THE PLACE OF EFT AND CHECK TRUNCATION IN CORPORATE PAYMENT SYSTEMS

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There is wisdom in many an old saying. Two are appropriate for the purposes of this article. One is:

“Be not the first by whom the new are tried  
Nor yet the last to lay the old aside.”<sup>1</sup>

The other, as somewhat modified for our purposes, would be:

“Old [payment systems] never die,  
They . . . fade . . . [but still for usage vie].”<sup>2</sup>

Much has been written about electronic fund transfers (hereinafter EFT) from the technical aspects.<sup>3</sup> Much has also been written as to the legal aspects and whether credit card or checking system analogies should apply.<sup>4</sup> It is the purpose of this article to explore

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1. A. POPE, *An Essay on Criticism*, in *SELECTED WORKS* 41 (1948).

2. The saying is modified from one on a coffee cup given the senior author by his daughter, viz.

“Old lawyers never die  
They just lose their appeal.”

The origin is obscure but may be an anonymous barracks song quoted by General of the Army Douglas MacArthur in his address to the Congress on April 19, 1951, namely,

“Old soldiers never die  
They just fade away

97 CONG. REC. 4125 (1951).

3. See, e.g., Brandel & Gresham, *Electronic Payments: Government Intervention or New Frontier for Private Initiative*, 29 BUS. LAW. 1133 (1974); Greguras & Wright, *How the New EFT Act Affects the Financial Institution/Consumer Relationship*, 11 U.C.C. L.J. 207 (1979).

4. See, e.g., Greguras, *The Allocation of Risk in Electronic Fund Transfer Systems for Losses Caused by Unauthorized Transactions*, 13 U. S.F. L. REV. 405 (1979); Mortimer, *Current Legal Problems Facing Commercial Banks Participating in Electronic Funds Transfer Systems*, 95 BANKING L.J. 116 (1978).

the potential impact of EFT on both the corporate treasurer and the banking system and to closely examine a voluntary system of corporate check truncation. Many of the writers describe the recent developments in free standing or through-the-wall electronic consumer-operated terminals<sup>5</sup> as new and some as even revolutionary.<sup>6</sup> But this is not really so. From the corporate treasurer's as well as the bank officer's viewpoint, the new consumer terminals are but a small addition to electronic fund transfer systems that have existed in an overall payments system for many years. Even check truncation<sup>7</sup> at the bank of first deposit is not a great change.<sup>8</sup>

### I. HISTORICAL OVERVIEW OF PAYMENT SYSTEMS

To put the new and essentially minor changes in proper perspective, a bit of an historical introduction is necessary. While Sir Henry Maine's statement that the progress of the law is from "status to contract"<sup>9</sup> may need some rethinking in light of today's trends toward greater consumer protection, the progress in payment systems is not from *a* to *b* but seems to be by adding *b* to the existing *a*. Thus unit of value trading was added to pure barter, but barter did not disappear.<sup>10</sup> The early units of value tended to be standardized, or nearly standardized, commodities such as cattle. But even with these commodities, variations in condition made the unit of value far from uniform. Uniformity could, however, be easily obtained in precious metals. Therefore the use of precious metals by weight gradually took the place of other commodities, and, in time, payments focused

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5. The terminals referred to, automated teller machines and cash dispensers (sometimes known as "magic money-machines"), are located throughout the United States in outer walls of bank buildings and off-site premises such as airports.

6. See, e.g., Naar & Stein, *EFTS: The Computer Revolution in Electronic Banking*, 5 *RUTGERS J. COMPUTERS & L.* 429 (1976); Schuman, *EFTS Revolution—King Kong in Search of a Trainer*, 32 *REC.* 174 (1977).

7. Check truncation involves "stopping the physical handling of checks at some phase of processing—and transmitting MICR (Magnetic Ink Character Recognition) data from checks . . ." G. White, *Assessing Check Truncation Opportunities*, *Burroughs Clearing House* 11 (Sept. 1979).

8. Credit unions have been truncating share drafts for some time, although not at banks of first deposit. The method used is known as intercept truncation. The process accounts for roughly 14 million truncated items per month nationally. See *Computer Model Shows S&Ls Could Cut Costs of Funds by Truncating Drafts*, *American Banker*, February 21, 1979.

9. H. MAINE, *ANCIENT LAW* 100 (1861).

10. Barter is still alive and well on an international scale. For example, Professor Robert Weigand, head of the Dept. of Marketing at the University of Illinois at Chicago Circle, reports that during the decade of the seventies Pakistan sent cotton to Bangladesh in return for jute rather than currency. Likewise, PepsiCo of the United States bartered in syrup and services for Stolichmaya vodka in an agreement whereby PepsiCo supervised the bottling of its product throughout the Soviet Union. Weigand, *International Trade Without Money*, 55 *HARV. BUS. REV.* 28 (1977).

on gold and silver of specified weight at a definite standard of fineness as units of value.

But gold and silver, even when minted and stamped by the government as a unit of value of a stated amount, were not satisfactory, since paring reduced the actual quantity of metal, thereby reducing value. The invention of the milled edge made paring easily detectable, but did not reduce the many problems involved in the physical transport of coin: weight, exposure to theft, errors of counting, need for safe storage space, and the like.

Fear of loss through carelessness, fire, or theft led to the deposit of monies for safekeeping with cashiers in Holland and the Mint and goldsmiths in England. Thereafter, the practice of lending against deposited funds was started. The depositaries thus became banks. At first, deposits were evidenced by promissory notes of the bank of deposit payable to bearer.<sup>11</sup> These notes were issued in various denominations, and higher denominations were exchangeable for a like face amount of other desired denominations.

Parallel with the development of coinage, or perhaps earlier in time, was the development of the use of private debts as a means of payment. To illustrate, a merchant in one city and country would sell goods to a merchant in another country or place. Rather than move gold in the opposite direction from the movement of goods, the merchant seller would write an order to his debtor, who could be in a far away locale, to pay the value to a third person, or as ordered by the third person. Disputes concerning these bills of exchange in England were first heard in the merchant courts of the great mercantile fairs, known as the Piepowder Courts.<sup>12</sup>

Although English merchant law had a well-developed system of negotiable paper by the Seventeenth Century, the common law courts experienced great difficulty in giving effect to the law merchant.<sup>13</sup> The difficulty culminated in Lord Holt's opinion in *Buller v. Crips*,<sup>14</sup> in which it was held that promissory notes were nonnegotiable.

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11. By the middle of the Nineteenth Century, bank notes of various independent state banks comprised almost the entire system of money in the United States. *Veazie Bank v. Fenno*, 75 U.S. (8 Wall.) 533, 536 (1869).

12. Strictly speaking, promissory notes came into usage before the bills of exchange, during the Thirteenth Century in England. Buyers at the mercantile fairs would give sellers their notes payable at another fair. Disputes concerning these notes were litigated in the Piepowder or Merchants' Courts, whose jurisdiction extended only to the particular fair in which they were held. By the Seventeenth Century the bills of exchange had become established and enforceable in the Staple Courts and Courts of Admiralty, and were thereafter recognized in the law courts of England. See generally F. BEUTEL, *BEUTEL'S BRANNAN NEGOTIABLE INSTRUMENTS LAW* 1-29 (7th ed. 1948).

13. See 8 W. HOLDSWORTH, *HISTORY OF ENGLISH LAW* (2d ed. 1937); 2 I. STREET, *FOUNDATIONS OF LEGAL LIABILITY* (1906).

14. 87 Eng. Rep. 793 (K.B. 1704).

The resulting displeasure of the merchants over their inability to enforce as negotiable promissory notes which they had been recognizing as negotiable for over 400 years was a prime motivation for the enactment of the Statute of Anne,<sup>15</sup> which put promissory notes on an equal footing with bills of exchange. Lord Mansfield's liberal approach to the absorption of the merchant law into the common law was reflected in his holdings in *Miller v. Race*<sup>16</sup> and *Grant v. Vaughan*<sup>17</sup> in which both notes and bills of exchange were recognized as enforceable negotiable paper.<sup>18</sup>

The point is that the bill of exchange as negotiable paper was recognized in the common law and continues to be used as such. It is found in the use of the documentary draft,<sup>19</sup> and the so-called documentary sale in which a seller prepares a paper order to his buyer to pay the price, attaches a bill of lading covering the goods, and procures some organization at the city of the buyer to present the papers and collect the payment.<sup>20</sup> It is found in letter of credit transactions,<sup>21</sup> which seem to be on the increase.

Although bills of exchange and letters of credit are still extremely useful, particularly for international trade, bank notes, due to their exchangeability, are more desirable when the amount fixed for one transaction is not inherently suitable for other transactions. Furthermore, the bank note enjoys the advantage of making credit risk evaluation easier than in the case of an individual's bill of exchange or promissory note, since the credit risk of an institution is substituted for that of an individual. A drawback, however, to users is the bearer character of the bank note. While negotiability does not make finders keepers, it does give the bearer of bank notes the power, but not the right, to create full ownership in an especial kind of bona fide purchaser called the holder in due course.<sup>22</sup>

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15. Statute of Anne, 1704, 3 & 4 Ann., c. 8 (repealed by Bills of Exchange, 1882, 45 & 46 Vict., c. 61, §96).

16. 97 Eng. Rep. 398 (K.B. 1758).

17. 97 Eng. Rep. 947 (K.B. 1764).

18. For a more detailed treatment of this subject, see F. BEUTEL, *supra* note 12.

19. See U.C.C. § 4-104(f).

20. See U.C.C. §§ 2-320(4), 4-104(f), 4-501 to -503. While § 2-320(4) requires payment without inspection by the buyer, U.C.C. § 2-321(3) says "[u]nless otherwise agreed;" a contract term on or after arrival allows the buyer to inspect unless the goods are lost, in which case payment is required against the documents.

21. See U.C.C. §§ 2-325, 5-101 to -117. While a C.I.F. term does not preclude dishonor of the draft on presentment, a letter of credit is the issuing bank's independent and irrevocable promise to pay on presentment.

22. See U.C.C. § 3-302. Ever since *Miller v. Race*, 97 Eng. Rep. 398 (K.B. 1758), the negotiable character of money has been established. It continues even though money is excluded from the coverage of Articles 3 and 4. See U.C.C. §§ 3-103(1), 4-102(1), 4-104(g).

In the United States, prior to the Civil War, three media of payment predominated: negotiable notes or bills of exchange of private businesses, state bank notes, and specie. This system might have remained intact longer were it not for the need to finance the Union Army, but the legislation taxing state bank notes had the unanticipated secondary effect of making more widespread the use of the check as a medium of payment.<sup>23</sup>

The troubles with the transfer of private notes were and are three-fold. One is the credit evaluation problem. This is lessened by the guaranty of every indorser of paper payable to order.<sup>24</sup> Order paper also has a lesser risk of ultimate loss through carelessness, since a true owner, at least in Anglo-American law, can recover from those taking the instrument after a necessary indorsement has been forged.<sup>25</sup> The very protection of the true owner just mentioned, however, causes the second trouble, namely, a need of assurance that no prior indorsement in the chain leading to one taking the instrument was forged.<sup>26</sup> The third trouble is that much of the private debt paper is time paper, not payable until a time certain in the future.<sup>27</sup> Thus, one who accepts paper of private individuals often has to find a buyer when it becomes desirable to have money to pay. Of course, where a demand exists, a market will be made, and there were and are note brokers;<sup>28</sup> but, note selling takes time, and time is money.

The gradual realization of the time factor in the use of money, or to put it a bit differently, the realization that idle funds meant a

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23. The National Bank Act of 1864, ch. 106, § 41, 13 Stat. 99, among other things, imposed taxes on notes issued by state banks, the primary medium of exchange at the time. See note 11 *supra*. Professor White has indicated that the need to finance the "war-torn Union" was probably a primary motivation for passage of the act, although Secretary of the Treasury Salmon P. Chase, among others, undoubtedly intended the act to have the effect of discouraging state bank notes and promoting the use of a national currency. Chase's wishes only partly became reality due to the expansion of checking accounts in the latter half of the Nineteenth Century. Thus, although state bank notes virtually disappeared because of the ten percent tax enacted in 1865, national currency accounted for less than ten percent of the nation's business transactions in the 1880's due to the use of bank-deposit credits (checks) as money. See generally J. WHITE, *BANKING LAW* 18-23 (1976).

24. See U.C.C. § 3-414.

25. The recovery is in conversion. See U.C.C. § 3-419(1)(c). For a brief discussion of the rule in the Continental Law Systems, see Leary & Husted, *An Approach to Drafting an International Commercial Code and a Modus Operandi Under Present Laws*, 49 *COLUM. L. REV.* 1070, 1090 (1949).

26. Such assurance consists of the indorsement warranty of the seller. See U.C.C. § 3-417(2) and its companion, U.C.C. § 4-207(2), made necessary because Article 4's "item" includes non-negotiable paper. See U.C.C. § 4-104(g).

27. To the need for credit risk evaluation was added the need for a discount calculation if the current market rate varied from the rate specified in the paper.

28. The practice is recognized in the more limited warranty given by the disclosed note broker in U.C.C. § 3-417(4). Significantly, this reduction in liability is not specifically afforded under U.C.C. § 4-207, but the § 4-207 warranties are not made except by the depositor of an item for collection who is the defined "customer" mentioned. See U.C.C. § 4-104(e).

monetary loss, and the above-mentioned threefold trouble with the use of transferable private notes also encouraged the growth of the use of transferable deposit balances as a medium of payment. The growth, however fantastic the present volume of checks being processed may seem,<sup>29</sup> has not driven out of use the Federal Reserve note, the bill of exchange, or the transferable promissory note, although the use of the latter has diminished greatly, due in part to the coming of age of accounts receivable financing, so that sellers no longer need notes from their mercantile or consumer customers for financing purposes.<sup>30</sup>

## II. THE CHECKING SYSTEM AS IT EXISTS TODAY— PAPER AND ELECTRONIC TRANSMISSIONS

Whatever the cause, the paper-based deposit credit transfer system caught on, and the number of check transactions is now truly staggering.<sup>31</sup> In essence, each check transaction consists of two elements: a message element and the account element or real transfer, triggered by the message and consisting of a series of debits and credits through an inter connected series of accounts which causes the amount of the check, debited from the payor's account, to come to rest as a credit to the payee's account in the same or a different financial institution. It is important to separate in our thinking the message element and the account element in a funds transfer. This is because in many check-originated transfers, the account element, due to computerized bookkeeping, has been wholly or partly in an electronic mode for some years.<sup>32</sup>

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29. See text accompanying note 45 *infra*.

30. The assignability of choses in action was a relatively late development in the law. It is interesting to note that long after merchants took notes only from credits not good enough for open account dealings, banks shunned accounts receivable and accepted gladly the discount of notes and trade acceptances.

31. See text accompanying note 45 *infra*. A very large California bank has informed the authors that three years ago it handled about two billion checks. In the process it moved about ten tons of paper every working day. One branch alone has produced for it daily a stack of computer printouts six feet high. The bank transported some of the paper 800 miles overnight, requiring a fleet of nine aircraft which flew more than a million miles over eleven routes from the Mexican Border to the Oregon state line. It also used more than 500 courier vans and cars to move the materials between branches and airports, covering 471 routes and tallying over 740,000 miles per month.

California is, of course, a state-wide, or should we say, state-long, branching state. But the movement of paper is required whether it be between unit banks or limited branching banks.

32. U.C.C. §§ 4-109, 4-204(3) were added to the U.C.C. in 1962 to cover the then-burgeoning uses of electronic check processing and bookkeeping. See U.C.C. § 4-109, Comment, Example 3; U.C.C. § 4-204, Comment 4. Computerized record-keeping is now nearly universal, although still done at off-premises processing locations for smaller institutions.

### A. Processing Time Lags in the System

In considering the checking system, the concepts of conditional or provisional and final credits to accounts must be understood. To simplify the bookkeeping, when checks are deposited to a creditor's account, a provisional credit is entered to that account. That amount, however, is not subject to withdrawal as of right until the check has cleared, *i.e.*, until the check has been forwarded to the payor bank and a reasonable time for its return unpaid has elapsed.<sup>33</sup> Nevertheless, since only between 1% and 1/2 of 1% of all deposited checks are returned unpaid,<sup>34</sup> only low balance or problem accounts are monitored for drawing against uncollected funds during the lag time between deposit and the day the funds become available for withdrawal as of right. Thus, in many instances, a corporate depositor can play the float (*i.e.*, draw against funds during the clearing time or draw checks in anticipation of deposits), by not depositing funds in its demand deposit account until, based on experience, the treasurer's department knows its checks will come home to be paid. In some cases the corporate treasurer knows that the process of posting<sup>35</sup> of the drawee bank will not reach the account-debiting stage until the day after the bank's physical receipt of the check. That delay is inherent in a delayed-posting bookkeeping practice.<sup>36</sup> Thus, a covering deposit of good

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33. See U.C.C. §§ 4-213(4)-(5). See *Rapp v. Dime Savings Bank*, 64 App. Div. 2d 964, 408 N.Y.S.2d 540 (1978), reversing a lower court's holding that a savings bank's schedule of availability (and hence the starting of interest) on deposits was unreasonably long and so violated § 4-213(4). The Appellate Division said:

[T]he record demonstrates that the time restrictions are reasonable and substantially related to the actual time period in which the Dime may expect to be notified that a check is uncollectible. That other banks may have somewhat shorter time restrictions does not mean that their checks clear any faster. Rather, it means only that those institutions are willing to accept the risk of loss at an earlier date.

*Id.* at 969, 408 N.Y.S.2d at 546.

The Pennsylvania Savings Fund Society has clarified its position regarding time restrictions by adopting a schedule of days to be allowed before payment orders may be written against funds deposited by checks drawn on banks in various geographical area. Checks drawn on Philadelphia banks require five days; those drawn on banks in the rest of Pennsylvania, New York, New Jersey, or Delaware require seven days; and fifteen days must be allowed when the bank is located elsewhere in the United States. *Pennsylvania Savings Fund Society, How to Avoid Unnecessary Service Charges* (1979).

34. The figure is one for all checks. See 1 *The Atlanta Payments Project, Research on Improvements of the Payments Mechanism, Phase III 46-47* (1972) (prepared by the Georgia Institute of Technology for the Federal Reserve Bank of Atlanta). The Atlanta study showed that merchants' experience with individual checks (*i.e.*, excluding government and business checks) found a much higher figure, about 1.4% of such checks.

35. See U.C.C. § 4-109.

36. See the discussion of posting items received on Monday as Tuesday's bookkeeping work in U.C.C. § 4-109, Comment, Example 1. In many banks, due to automation, the process is much faster today.

or collected funds can be delayed, in view of the two days processing period allowed payor banks.

The reason for the two-day processing period allowed payor banks is not hard to grasp. Incoming checks presented for payment must first be proved; the bank makes sure that the bundle of checks received in fact totals the amount claimed by the sender. Each incoming bundle is then given a batch number and put through a sorting process until all the checks to be charged to a particular account from whatever source received are together in one group. The sorting process is still physical, but mechanically performed on high-speed machines that read the numbers on the bottom of the check.<sup>37</sup> These numbers first identify the bank on which the check is drawn, then identify the account in that bank to which the check is to be charged, and then state the amount of the check which has been encoded on it by the first bank using encoding equipment. All these numbers are printed with a special magnetic ink and the reading is done by a magnetic reaction in the machine to the magnetism in the ink. The whole process is called MICR, an acronym for *Magnetic Ink Character Recognition*. The bottom line of figures is called the MICR Line.

The sorting machines prepare a computer tape or disc, depending on the computer system used, and a computer printout is made by running the tape through the computers in which account balances are stored. The printout by account discloses the remaining balance or overdraft and identifies items causing an overdraft or as to which a stop order notice has been entered.

The physically sorted checks and the account printout are then delivered to the personnel in the bookkeeping department who make such physical inspection of the checks as the bank requires and perform the basic judgmental tasks in the process of posting. This will include inspecting checks for obvious alteration, forged signatures, and stop orders as required by the bank's process of posting.<sup>38</sup> In addition, more senior personnel will decide whether a setoff will be exercised or an overdraft payment authorized from a large item printout, or whether a check for a recent deposit of good funds should be made.

If good funds are deposited at the right point in time, before the process of posting has gone too far, checks will be paid rather than

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37. The fastest machines do this at a rate of 120,000 checks an hour, but due to interruptions, the actual processing rate is about 100,000 an hour. These figures were discussed at a meeting of the National Commission on Electronic Fund Transfers on April 9, 1976, in Washington, D.C. They were supplied by the Executive Vice President of Operations of the First National Bank of Boston.

38. See the material from the summary judgment affidavits in *West Side Bank v. Marine Nat'l Exch. Bank*, 37 Wis. 2d 661, 155 N.W.2d 587 (1968), quoted in Leary & Tarlow, *Reflections on Articles 3 and 4 for a Review Committee*, 48 TEMP. L.Q. 919, 928 n.25 (1975).

returned N.S.F. The task of money management for the corporate treasurer, then, is threefold: first, to expedite the receipt of actual and finally collected funds by his corporation; second, to have these funds promptly earning money for the enterprise until the last moment before disbursement; and, finally, to disburse the funds in final payment of corporate obligations. Demand accounts pay no interest,<sup>39</sup> so to accomplish the second task the corporate treasurer must invest his funds in money market instruments designed to produce actual and finally collected funds at the instant, but not before, they are needed to cover checks drawn.<sup>40</sup> To put it bluntly, any person dealing with sums large enough that the earnings of a few day's interest will yield a profit over the transaction costs of investing the funds has a strong desire to expedite the receipt of incoming funds and delay the disbursement of outgoing funds so as to profit by the time lag.

National corporations can make use of a geographically created time lag in the present system through the use of long-existing electronic fund transfer systems. The national corporation can designate banks in the areas where substantial numbers of payors to it are located as the places of payment, using a lock-box technique.<sup>41</sup> Through a terminal in the treasurer's office it can receive printouts or obtain readings on a weekly or daily basis recording deposits at these local banks. Then, at the proper time, using the Fed-Wire<sup>42</sup> or Bank-Wire systems, the treasurer can transfer these funds, with a transfer lag measured in minutes, not days, to a central account where payment can be made for previously ordered earning investments to produce actual and finally collected funds at that, or another designated banking institution, in proper time to cover checks requiring payment.

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39. See note 203 *infra*.

40. By arranging maturities and providing for payment by a credit transfer of federal funds, i.e., credit to the receiving bank's account at its Federal Reserve Bank from another account at a Federal Reserve Bank, instant availability is obtained. The transfer would be by the on-line Federal Wire Service. See note 42 *infra*.

41. The bill payer is directed to send his remittance to a designated post office box. The box is locked and opened by bank personnel who process the incoming checks directly into the payee's account while stamping the payee's indorsement thereon.

42. Fed-Wire is the means by which Federal Reserve Banks are connected electronically for the rapid transmission of financial and administrative messages. The system originally used Western Union lines. Later, because of a need for greater security, the Federal Reserve adopted its own system using Morse Code in 1918, followed by teletype in 1937. Updates of the system in 1940 and 1953 resulted in a relay system of automatic messages. The most recent development was a fully automated network in the early 1970's, headquartered at Culpepper, Virginia, which transfers instantaneously member bank reserve account balances, federal government securities, and administrative and research information. 62 FED. RES. BULL. No. 6, 486 (1976).

The Federal Reserve Board was recently concerned with a practice called remote disbursing<sup>43</sup> whereby some corporations seek out disbursing banks at locations ensuring the longest possible collection time lag due to the necessity for physical transportation of checks to those banks for presentment for payment, and then cover those checks by wire transfers.

The issue is, when one payment system has built-in time lags, whether the users of that system, after becoming accustomed to it for a period of time, acquire a sort of prescriptive right to the time lag. Or to put the matter another way, if a proposed new payments system is to compete in the marketplace with existing systems, will it not have to be so structured as to provide a monetary substitute for the earnings obtained through the use of money management techniques taking advantage of the time lags in the present system?

*B. Cost and Volume of the System*

Using a paper-based message element requiring physical transport and physical sorting is expensive and, as we have seen, time consuming. A May 1975 study<sup>44</sup> estimated the annual cost in the 1970's, of the then payments systems as:

Cash .....	\$ 2.95 billion
Checks .....	8.20 billion
Credit Cards .....	2.76 billion
	_____
Total .....	\$13.91 billion

It also has been estimated that the numbers and values of payments made in the United States in 1976-1977 fiscal year were of the following order of magnitude in billions:

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43. Remote disbursement is the practice of delaying final collection of funds by drawing checks for local payments on banks located across the country. Because the possibility of insufficient funds in the drawee's account at the remote bank accompanied by the increased time required to discover the insufficiency creates a greater risk of loss for recipients of remotely disbursed checks, the Federal Reserve Board's position is that the banking industry has a responsibility not to design or encourage such practices. Nevertheless, the Board is in favor of services that provide greater control over daily corporate cash requirements (such as electronic transfers). See 65 FED. RES. BULL. No. 2, 140, 141 (1976); Federal Reserve Press Release, Jan. 11, 1979; *Remote Disbursement Discouraged*, 5 CASH MANAGEMENT FORUM (First National Bank of Atlanta) No. 1, at 1 (Feb. 1979). See also Kutler, *Agencies Probing Remote Disbursement*, American Banker, Oct. 30, 1978, at 1, col. 2.

44. ARTHUR D. LITTLE, INC., THE CONSEQUENCES OF ELECTRONIC FUNDS TRANSFER 58, Table 408 (1975).

<i>Type</i>	<i>Number</i>	<i>%</i>	<i>Amount</i>	<i>%</i>
A. <i>Cash</i>	259.753	88.46	\$ 236.	9.51
B. <i>Bank Credit: Paper-Based Message</i>				
Retail Payments	27.720		\$ 2,106.	
Bank Card	1.103		33.	
Other Card	3.897		38.	
U.S. Treasury	0.768		400.	
Business	0.280		8,424.	
<i>Total Paper:</i>	33,768	11.50	\$11,001.	23.94
C. <i>Bank Credit: Electronic Message</i>				
Retail ACH	0.012		\$ 3.	
Retail P.O.S.	0.003		0.1	
Treasury ACH	0.089		23.	
Off-Line Bank Wire	0.002		5,100.	
Off-Line Fed. Wire	0.001		2,040.	
CHIPS	0.012		9,200.	
On-Line Fed. Wire	0.011		18,350.	
<i>Total Electronic:</i>	0.130	0.044	\$34,716.1	75.55
<i>Total Non-Cash:</i>	33,898	11.544	\$45,717.1	99.49
<i>Grand Total:</i>	293,651	100%	\$45,953.1	100% <sup>45</sup>

In short, while 75.55% by value of the almost \$46 trillion of payments were electronic, these constituted but 44 thousandths of 1% by number of the almost 294 billion of transactions. On the other hand, cash payments were about 88½% of the number of payments, but covered only one half of 1% of the value exchanged. The checking/credit card system consists of 11½% by number and 24% by value of the payments system. While costs of the checking system alone, at \$8.20 billion, amount to only four hundredths of 1% of the total value exchanged, the actual amount of the cost is large enough to encourage substantial cost-saving efforts.

The foregoing illustrates that electronic messages have already caused transfers of bank credit through the debiting and crediting of

45. Federal Reserve Bank of Cleveland, Annual Report at 9 (1977).

accounts in tremendous volume. A study of cable transfers indicates that electronic messages have been used for almost a century.<sup>46</sup>

From the corporate treasurer's point of view, message preparation savings by using direct electronic payments may be substantial. It has been estimated that the Treasury Department saves 15.6¢ per check by paying the monthly Social Security stipend by direct electronic deposits into the recipient's account at a financial institution designated by the recipient rather than by check.<sup>47</sup> If a substantial number of payroll checks could be transferred to direct deposits through electronic messages instead of paper checks, the savings on a weekly payroll would be \$8.125 per employee per year.<sup>48</sup>

In determining the cost savings another factor must be considered. Not everyone will choose the same method of payment. At present only 10 million out of the 40 million Social Security recipients have elected to accept direct deposits.<sup>49</sup>

In July 1979, according to the August report of the National Automated Clearing House Association, private use of Automated Clearing Houses was only about 2.8 million entries for the month,<sup>50</sup> which, when annualized, amounts to only one thousandth of the number of payments made by transfer of bank credit. Yet a survey conducted by Payment Systems, Inc. in April of the same year showed that financial executives of some 240 responding companies expected that by 1985 direct deposit of payroll would grow to include 20% of all employees.<sup>51</sup> A Treasury Department campaign is aimed at enrolling 40% of Social Security recipients in a direct deposit program by 1981.<sup>52</sup> These figures, even though representing substantial growth over present levels, indicate to the authors a substantial unwillingness among recipients to enter the electronic age in banking.

On the corporate side, the Payment Systems, Inc. study disclosed that only 7.3% of those using a direct payroll deposit scheme did so in order to improve cash management, and 29.3% of the users found that the electronic system cut payroll-processing costs.<sup>53</sup> Of the non-users, 39% gave the resulting loss of float as one reason for nonuse,

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46. See, e.g., *Equitable Trust Co. v. Keene*, 232 N.Y. 290, 133 N.E. 894 (1921); *Legniti v. Mechanics Bank*, 230 N.Y. 415, 130 N.E. 597 (1921); *Strohmeier v. Guaranty Trust Co.*, 172 App. Div. 16, 157 N.Y.S. 955 (1916).

47. NACHA, *Sure Pay Update* at 6 (August, 1979) (official publication of the National Automated Clearing House Association) [hereinafter cited as NACHA]. The \$.156 per check figure was computed from statistics provided therein.

48. *Id.*

49. *Id.*

50. *Id.* at 5.

51. *Id.* at 6.

52. *Id.*

53. *Id.* at 7.

and 27% objected to the need to operate both a paper based and an automated system.<sup>54</sup> Employee lack of interest in the program was the greatest problem faced by those who used direct deposit of payroll and a reason for nonuse advanced by 41% of the nonusers; indeed, it headed the nonusers' list of reasons.<sup>55</sup>

Thus, in considering a direct payroll plan, the business decisions for a good while must evaluate whether maintaining two distinct payroll operations will reduce overall costs. This is because the reduced costs in either system, electronic or paper, result from spreading fixed costs of necessary equipment over a large number of payments. A reduced number of payments in either the check system or an electronic system will increase the absolute value of fixed costs to be absorbed by each transaction. Since the check system is more labor intensive than the electronic system, reductions in check load would have a lesser effect on unit costs of check processing than reductions by the same number of payments to electronic messages.

### III. LEGAL RULES AFFECTING THE USE OF EFT BY CORPORATIONS

Will the expected growth in electronically originated transfers be realized or are there hampering legal constrictions that must first be overcome?

#### *A. The Federal Electronic Funds Transfer Act*

Corporate payments to consumers must comply with a federal law aimed at protecting consumer interests in the emerging electronic message system. Subchapter VI of the Consumer Credit Protection Act,<sup>56</sup> entitled the Electronic Funds Transfer Act,<sup>57</sup> was enacted by Congress in the closing hours of the 95th Congress after revisions were made in the early morning hours. It becomes fully effective on May 10, 1980, and will apply where payments are to be made to "consumers" as defined in that subchapter.<sup>58</sup> Two sections, 1693(g),<sup>59</sup> on consumer liability for unauthorized transfers, and 1693(i),<sup>60</sup> on issuance of cards (to a consumer), have been effective since February 8, 1979. The Federal Reserve Board has issued final regulations as to

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54. *Id.*

55. *Id.*

56. 15 U.S.C.A. §§ 1601-1693 (West Supp. 1979).

57. 15 U.S.C.A. §§ 1693-1693(r) (West Supp. 1979) (effective May 10, 1979, except §§ 1693g and 1693i, which became effective Feb. 10, 1979).

58. A "consumer" is a "natural person." 15 U.S.C.A. § 1693a(5) (West Supp. 1969) (effective May 10, 1979).

59. 15 U.S.C.A. § 1693(g) (West Supp. 1979).

60. 15 U.S.C.A. § 1693(i) (West Supp. 1979).

sections 1693(g) and 1693(i)<sup>61</sup> and at the time of this writing is considering comments on its proposed regulations, to be known as Regulation E, under the sections becoming effective on May 10, 1980.<sup>62</sup>

With respect to some sections, the peculiarities of the drafting may create unexpected problems. When the word "consumer" is used in connection with or relating to the term "account," it is possible that the meaning is limited to a natural person's transactions for personal, household, or family purposes.<sup>63</sup> But since "consumer" alone is merely defined as a natural person, it thus could include a sole trader operating a very substantial business. Where the word "account" is used, the definition requires that it be "established *primarily* for personal family, or household purposes."<sup>64</sup> Thus, legislatively, the transactions of a small, side line, personal business could be subject to all the provisions of the Act, but the commingling of the household funds with the transactions of any sizeable sole-trader-operated business would take an account out of the primarily household purpose character.<sup>65</sup>

Section 1693(k),<sup>66</sup> on compulsory use of electronic fund transfers, simply provides that "no person may condition the extension of credit to a consumer on such consumer's repayment by means of pre-authorized electronic fund transfers." Taken literally with the definition of a "consumer," a corporation granting credit to sole traders could not condition repayment on repayment by electronic means from the sole trader's business accounts. Equally, section 1693(1),<sup>67</sup> prohibiting waivers of rights established by the Act, has no reference to an "account" and, thus, would render ineffective any sole trader's waiver of rights under section 1693(k). In addition, once credit is extended it becomes a debt, and the effect of the legal tender laws<sup>68</sup> on attempted cash repayments would have to be considered.

Subsection (2) of section 1693(k) is directly applicable to the direct deposit of payroll situation; however, it is far more limited than subsection (1), applicable to payments to creditors. It provides that "no person may require a consumer to establish an account for receipt

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61. 44 Fed. Reg. 33,837 (1979).

62. 44 Fed. Reg. 18,480 (1979).

63. See 15 U.S.C.A. § 1693a(2) (West Supp. 1979) (effective May 10, 1979). This section defines "account" as one used primarily for personal, household or family transactions.

64. *Id.* (emphasis added).

65. *Query* the effect of sections not using the term "account" on joint ventures and partnerships of natural persons unless the entity theory is well entrenched in the jurisdiction.

66. 15 U.S.C.A. § 1693(k) (West Supp. 1979) (effective May 10, 1979).

67. 15 U.S.C.A. § 1693(1) (West Supp. 1979) (effective May 10, 1979).

68. See, e.g., 31 U.S.C. § 463 (1977).

of electronic fund transfers with a *particular* financial institution as a condition of employment or receipt of a government benefit" (emphasis added). Taken literally, the language would permit an employer to require, as a condition of employment, the establishment of an account in any institution accepting direct deposit of payroll as a condition of employment, at least where the employee has access to several institutions accepting such transfers.<sup>69</sup>

It is true that the ability of an employer to so condition employment is subject to a number of constraints. Where employees are covered by a collective bargaining agreement, the condition would have to be compatible with the terms of the agreement and as a practical matter be not opposed by the union. In addition, the terms of applicable state statutes as to the means of paying wages would have to be evaluated.<sup>70</sup>

The Act has nothing that bears on the means selected by a corporation, or other business entity, for paying by electronic means the debts it owes to individuals or other entities, for distributing cash dividends on stocks, or for paying the interest on registered bonds if the terms of the debt security authorize an electronic mode of payment.<sup>71</sup> On the other hand, implementing a provision for an entirely electronic credit transfer would require the purchasers of corporate securities to give each corporation in which they hold securities both the numerical designation of the holder's bank and the holder's account number at that bank. Then, with each change of address involving a change of bank, and indeed with every change of bank not involving a change of address, the new numbers would have to be reported. Since changes of address must be reported in any event, there seems to be no great operational obstacle to implementation of such a plan, whether the security be a certificated security or a noncertificated security under revised Article 8 of the Uniform Commercial Code.<sup>72</sup> There could, however, be a marketing objection in that individuals would have to be sold on the new method of payment at the time they were being sold on the security itself, and this might make the underwriting more difficult.

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69. The definition of "institution" is broad enough to include banks, mutual savings banks, savings and loans, and credit unions. See 15 U.S.C.A. § 1693(a) (8) (West Supp. 1979) (effective May 10, 1979).

70. See, e.g., KY. REV. STAT. § 337.030 (1973); PA. STAT. ANN. tit. 43, § 271 (Purdon 1964); TENN. CODE ANN. § 50-303 (1966).

71. The language of the usual corporate debt instrument is to pay "in lawful money of the United States of America which at the time of payment is legal tender for the payment of public and private debts." Nothing compels the use of such language, and in some fully registered debt securities provision is made for payment by check.

72. See U.C.C. § 8-102 (1978 revision).

### B. Contract—Check Truncation

Is there then any intermediate position that could save enough processing cost to overcome the loss of earnings due to the shortening of time lags in the payment process? Is there a halfway measure where the shift from a paper message to an electronic message can occur after paper has originated the message but before great batches of paper checks have to be sent around the country?

One cost saving that has been effected by a number of large corporations is the elimination of the return of checks from the payor bank to the drawer. Many banks encode the serial number of the check in the MICR line and the computer-prepared statements report the payments made by serial number with an asterisk indicating missing numbers. The drawee bank keeps the checks for an agreed period subject to physical retrieval and then for a longer period on microfilm or microfiche. Reconciliation is done by reference to the corporation's check issuance records of amount, authorization, and name of payee. Under the usual Business Records in Evidence Act,<sup>73</sup> the corporation can prove payment. The same proof should be accepted by the I.R.S.

In another area, credit union share drafts use a truncation method between the credit union and the payable-through institution or data processing organization designated as the place of presentment. The MICR line is transmitted to the credit union which then, if for any reason the item should not be paid, rejects the item. The paper draft is then returned by the payable-through bank or the processing organization. This process is called intercept truncation but occurs too far down the line to effect maximum savings.<sup>74</sup>

Avoiding the unfamiliar word truncation, three years ago the American Bankers Association formed a study group called "The Check Safekeeping Task Force." Last May, at the American Bankers' Association's National Operation and Automation Conference, a Check Safekeeping Pilot (hereinafter Pilot) was announced.<sup>75</sup> In the following summer the 100 largest banks in the United States were invited by the Association to share their views on the Pilot program. Sixty-seven of the banks sent representatives to the meeting.<sup>76</sup> The Pilot is

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73. Over two thirds of the states have adopted the UNIFORM PHOTOGRAPHIC COPIES OF BUSINESS AND PUBLIC RECORDS AS EVIDENCE ACT, or similar provisions, providing for business records to be preserved on microfilm. The original records can then be destroyed and the microfilm admitted as evidence. See, e.g., CAL. CIV. EVID. CODE §§ 1550-1551 (West 1966); DEL. CODE ANN. tit. 10, § 4310 (1953); MASS. GEN. LAWS ANN. ch. 233, § 79E (West 1968); N.J. REV. STAT. § 2A 82-38 (1964); PA. STAT. ANN. tit. 28, § 141 (Purdon 1958).

74. See note 8 *supra*.

75. See NACHA, *supra* note 47, at 7.

76. *Id.*

to be launched in March of 1980, initially applying only to corporate dividend checks and U.S. Treasury checks.<sup>77</sup> It may show us the way in other corporate payment areas where there is reluctance to accept a fully electronic system.

These checks will carry an indication that they are subject to the program, and will be delivered to the payees in the usual way. They will be deposited by the payee or any subsequent indorsee in the traditional manner. When received by a bank participating in the program either for deposit, or in a cash letter for further forwarding, a reading of the MICR line on the check, together with an audit-identification number, will be thereafter forwarded to the payor bank.<sup>78</sup> Since the MICR line contains only the identification of the payor bank, the drawer's account number, the check number from the drawer's check numbering system, and the amount of the check as encoded, the payee's name will not be transmitted. The forwarding will, of course, be done electronically, or by the transmission of a tape. Dr. Allen Lipis has estimated that, with sufficient volume, the processing savings will amount to about 5¢ per check,<sup>79</sup> or \$20,000 for each unit of 400,000 checks processed.

As planned, the pilot involves a commercial account; accordingly, the Electronic Funds Transfer Act has no application. There are, however, other issues raised by the program.

Under the Uniform Commercial Code, there is considerable freedom for contracts that vary the effect of the provisions of the Code.<sup>80</sup> By agreeing to the program, the drawer authorizes the charge to the account. The U.C.C. does not attempt to regulate the contract between bank and depositor in any comprehensive manner. Section 4-401<sup>81</sup> refers to the order in which items may be charged to the account even though the charge may create an overdraft. It refers to "otherwise properly payable"<sup>82</sup> items. But the contract made by the drawer with his bank will make the receipt of the MICR line a properly payable payment order whether or not it fully qualifies as an item under the Code.<sup>83</sup> The drawer may be the paying corporation, or it may be a

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77. The information was obtained in a telephone conversation on September 14, 1979 with Dr. Allen H. Lipis, President of Electronic Banking, Inc., a memorandum of which is on file in the Library of the Delaware Law School of Widener University.

78. *Id.*

79. *Id.*

80. U.C.C. §§ 1-102(3), 4-103(1).

81. U.C.C. § 4-401.

82. *Id.*

83. See Clarke, *An Item Is an Item, Article 4 of the U.C.C. and the Electronic Age*, 25 BUS. LAW. 109 (1969). But U.C.C. § 4-104(e) refers to an item as an

bank acting as a corporation's disbursing agent, although in that case the bank's principal will also have agreed to the procedure.

The effects of such a program on timing of receipt of funds seem to be primarily for the benefit of the payee in that actual and finally collected funds will be at the payee's disposal sooner. The travel time for a physical movement of checks is eliminated, and, therefore, the charge to the corporation's account will occur sooner. Will the loss of lag-time earnings be a detriment? Cost savings may overcome this loss as the cost of much of the physical handling between banks is also eliminated. How much of the cost savings will be passed on to those outside the banking system remains to be seen, but, in today's world of escalating costs, a lesser increase in the cost of banking services is, in reality, a cost saving.<sup>84</sup>

#### IV. RISKS ENCOUNTERED IN THE PAPER-MESSAGE PAYMENTS SYSTEM

What are the other risks run by the participants in the payments system, and how will they be affected by the operation of the Pilot?

The risks are all, or almost all, risks of three categories: a wrongful, careless, or accidental intrusion into the smooth operation of the payments system. In the paper-based system the place of the intrusion has a bearing on the allocation of risk. There can be seven locales, and risk allocation may vary, depending on the locale of the unauthorized intrusion.

##### A. Origination Risks

Intrusion can occur at the origin of the message. That is to say an unauthorized message may be created in the course of the message creator's process of preparation and dispatch. In the paper system there can be forgery of the drawer's signature either where manual

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"instrument," a term usually referring to something written on paper or the parchment, Section 4-104, Comment 4 states:

The word "item" is chosen because it is "banking language" and includes non-negotiable as well as negotiable paper calling for money and also similar paper governed by the Article on Investment Securities (Article 8) as well as that governed by the Article on Commercial Paper (Article 3).

Georgia has added to its code definition on the following: "[I]tem shall also include any stored electronic message unit for the payment of money." GA. CODE ANN. § 109A-4-104(g) (1979).

84. Dr. Paul S. Nadler estimates that it costs at least forty cents just to cash a customer's check in a branch bank. He also points out that banks can no longer count on idle funds of large depositors to subsidize the active smaller accounts. 1 Wilmington (Del.) Trust Co., Straight Talk, No. 1 at 3 (1979).

signatures are used,<sup>85</sup> or where check-signing machines are used.<sup>83</sup> The unauthorized intrusion can be in the message creator's process of approving the payee's name, as where the person authorized to sign or to imprint prepares checks payable to fictitious payees or to himself. Also, the payee's name may be selected earlier in the payment process, as in the padded-payroll frauds or the fictitious-invoice frauds.

At the common law, risks were allocated in two ways. The rule of *Price v. Neal*<sup>87</sup> placed the risk of forged drawer's signatures on the drawee almost as a rule of absolute liability<sup>88</sup> unless discovery before completing payment resulted in rejection.<sup>89</sup> Conversely, where the authorized signing officer did not intend the named payee (other than himself) to have any interest in the order, liability remained with the drawer, since by a legal fiction the paper was deemed to be bearer paper,<sup>90</sup> so that the forged indorsement was an unnecessary indorsement, and payment to any person was effective. This rule was codified in the 1890's in the Uniform Negotiable Instruments Law.<sup>91</sup> But so strong was the will or intent theory of contract law as applied to the actual check signer that, at common law, the fictitious-payee rule did not apply to the intent of the payroll-padding clerk or the accounts payable clerk approving phoney invoices. The check was an order of

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85. U.C.C. § 3-404(1) provides that an unauthorized signature is "wholly inoperative as that of the person whose name is signed." The next clause of subsection (1) makes it operate as "the signature of the unauthorized signer in favor of any person who in good faith . . . takes it for value." Thus, such subsequent "takers" have good title to the instrument and can become holders in due course, but have no claim against the drawer. They also break no warranty of title when indorsing as they have good title to the paper.

86. The definition, in U.C.C. § 1-201(39) of "signed" provides that it includes "any symbol executed or adopted by a party with present intention to authenticate a writing." In *Perini Corp. v. First Nat'l Bank*, 553 F.2d 393 (5th Cir. 1977), the court quotes from the form of corporate resolution required by the banks in that case, showing that the payor banks were authorized and directed:

To honor all checks, drafts or other orders of payment of money drawn in the name of Perini Corporation on its Regular Accounts . . . when bearing or purporting to bear the single facsimile of R. A. Munroe . . . said banks shall be entitled to honor and charge Perini Corporation for all such checks, . . . regardless of by whom or by what means the actual or purported facsimile signatures thereon may have been affixed thereto, if such facsimile signature resembles the facsimile signature from time to time filed with said banks.

*Id.* at 400.

Similar language is required by all banks. As to the language, the *Perini* opinion states: "In effect at all times relevant to this litigation, this assumption of risk was the price Perini undertook to pay, voluntarily and at arms length, for the convenience of the facsimile signature machine." *Id.*

87. 97 Eng. Rep. 871 (K.B. 1762).

88. See U.C.C. §§ 3-417(1)(b), 3-418, which have adopted principles of *Price v. Neal*, 97 Eng. Rep. 871 (K.B. 1762).

89. See U.C.C. § 3-507.

90. See *Phillips v. Mercantile Nat'l Bank*, 140 N.Y. 556, 35 N.E. 932 (1894); *Shipman v. Bank of N.Y.*, 126 N.Y. 318, 27 N.E. 371, 13 N.Y.S. 475 (1891).

91. 1 NEGOTIABLE INSTRUMENTS LAW § 9(3) (1938) (superseded by U.C.C. § 3-405).

the signing officer, thus only his intent controlled. Banks were liable for payments to fictitious payees as payments on forged indorsements when the check signer had no knowledge of the fictitiousness.<sup>92</sup> As businesses increased in size and as the complexities of payment origination became better understood by lawyers, several states enacted legislation amending the Uniform Negotiable Instruments Law<sup>93</sup> to give the bearer paper effect when the agent or employee of the drawer supplying the name of the payee to the check signer had the requisite intent to divert the funds to his or his co-conspirator's use. The Uniform Commercial Code, while abandoning the bearer paper fiction, did adopt the policy of these statutes.<sup>94</sup> The policy was to place on an employer the risk of loss from indorsements forged by his employees where these same employees had fraudulently induced the issuance of the instrument. The same rule was not applied to employee forgery of the drawer's signature; the strict approach of contract law was applied. The drawee owed the drawer. The drawee could, therefore, except in limited circumstances, only be protected by paying on the

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92. *See, e.g.*, National Sur. Co. v. National City Bank, 184 App. Div. 771, 172 N.Y.S. 413 (1918); Detroit Piston Ring Co. v. Wayne County & Home Sav. Bank, 252 Mich. 163, 233 N.W. 185 (1930); American Sash & Door Co. v. Commerce Trust Co., 332 Mo. 98, 56 S.W.2d 1034 (1932).

93. Alabama, Arizona, California, Georgia, Idaho, Illinois, Iowa, Minnesota, Missouri, Montana, New Mexico, North Carolina, Oregon, West Virginia, and Wyoming.

94. *See* U.C.C. §3-405(1)(b)-(c). Note that in recognition of the fact that effecting payments, today, is a process, even in the imposture situation, the deception does not have to operate directly on the check signer. *See, e.g.*, Delmar Bank Union v. Fidelity & Deposit Co., 300 F. Supp. 496 (E.D. Mo. 1969), *rev'd on other grounds*, 428 F.2d 32 (8th Cir. 1970); Fidelity & Deposit Co. v. Manufacturers Hanover Trust Co., 63 Misc. 2d 895, 313 N.Y.S.2d 823 (Civ. Ct. 1970); Philadelphia Title Ins. Co. v. Fidelity-Philadelphia Trust Co., 419 Pa. 78, 212 A.2d 222 (1965).

There has been recognition of check issuing as a process in the area where an agent or employee supplies the payee's name. In *New Amsterdam Cas. Co. v. First Pa. Bank & Trust Co.*, 451 F.2d 892 (3rd Cir. 1971), Adams, C.J., writing for an unanimous panel, said:

For the purpose of giving meaning to the word 'supplied' in Section 3-405(1)(c), we can find no viable place to draw the line within the business enterprise of the drawer . . . . When Wexler, by submitting the fraudulent sell order to the trading room at Smith [the brokerage house] initiated normal business practice to produce a check payable to a named payee, and Wexler intended the payee to have an interest in the proceeds of the check, he 'supplied' Smith with the name of the payee, thereby making his forged indorsement effective as between Smith and the drawee bank.

451 F.2d at 898.

It is submitted that Chief Judge Adams was speaking about drawing a line between Wexler, the fraudulent sales representative, and the check signer. His very language indicates a line similar to that drawn in U.C.C. §8-205(b), which limits issuer liability for forged signatures on a security to forgeries by "an employee of the issuer . . . entrusted with the responsible handling of the security." The Neufeld line could be drawn at employees entrusted with responsible initiation of the normal business practice leading to the production of a check. This would exclude janitors and chairpersons, as well as others not significantly involved in directing the process.

order of the drawer.<sup>95</sup> It was up to the drawee to ascertain the genuineness of the order, just as it is up to an obligor to ascertain the genuineness of an assignment of contract rights today.<sup>96</sup> For ease of future reference we will call the risks just discussed "Origination Risks."

### B. *Nonbank-Transmission Risks*

The next locus of intrusion is found in the transmission process where the paper message moves from the drawer-payor to the payee. Here the cause of the intrusion could be a careless misaddress to a person of the same name as the payee,<sup>97</sup> a careless leaving of spaces facilitating raising the amount stated in the message,<sup>98</sup> or a loss or destruction in the mails.<sup>99</sup> Except in the last instance, the payment is not made according to the drawer's order; therefore, the payor bank must recredit the account. The payor banks have, however, the protection of the guaranty of prior indorsements developed in pre-Code practice and continued in the Code's presentment warranties in both Articles 3 and 4.<sup>100</sup> Thus the payor bank, upon recrediting the drawer's account, is entitled to indemnity from the presenting bank and all prior banks handling the message in the paper system. Of course, where there is loss in the mails and the check does not show up again in the collection process, the debt is unpaid and the payee collects from the drawer whose account has not been debited. Again, for ease of future reference, let us refer to these risks as "Nonbank-Transmission Risks."

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95. See U.C.C. §§ 3-404(1), 4-401. Note that § 3-404(1) refers only to ratification or preclusion as exceptions. U.C.C. §§ 3-406, 4-406 are examples of preclusion, but there is the limitation of "good faith and in accordance with the reasonable commercial standards of the drawee's . . . business" in § 3-406. Also, § 4-406(3) withdraws its protection "if the customer establishes lack of ordinary care on the part of the bank in paying the item(s)."

96. See RESTATEMENT (SECOND) OF CONTRACTS § 170, Comment h (1973) (Tentative Drafts Nos. 1-7); *Gibraltar Realty Corp. v. Mount Vernon Trust Co.*, 276 N.Y. 353, 12 N.E.2d 438, 298 N.Y.S. 187 (1938); cf. *State Factors Corp. v. Sales Factors Corp.*, 256 App. Div. 101, 12 N.Y.S.2d 12 (1939) (failure of assignee of accounts receivable to give notice of assignment to debtors did not affect assignee's right to recover from subsequent assignee that collected from debtors).

97. See, e.g., *Citizens' Union Nat'l Bank v. Terrell*, 244 Ky. 16, 50 S.W.2d 60 (1932); *Glenn L. Martin Co. & Use of Am. Mut. Liab. Ins. Co. v. Fidelity-Baltimore Nat'l Bank & Trust Co.*, 218 Md. 28, 145 A.2d 267 (1958); *S. Weisberger Co. v. Barberton Sav. Bank*, 84 Ohio 21, 95 N.E. 379 (1911).

98. See, e.g., *Reiter v. Western State Bank*, 240 Minn. 484, 62 N.W.2d 344 (1953); *Weiner v. Pennsylvania Co. for Insurances on Lives & Granting Annuities*, 160 Pa. Super. 320, 51 A.2d 385 (1947).

99. As by an airplane crash or similar casualty, or theft from an addressee's mailbox.

100. See U.C.C. §§ 3-417, 4-207.

### C. Payee-Processing Risks

A third locus of risks of intrusion lies in the payee's message-processing procedures. Here the typical frauds are the extraction of paper messages from the payee's processing at the envelope-opening stage,<sup>101</sup> the accounts receivable posting stage,<sup>102</sup> or by the cash-out ploy of the deposit messenger.<sup>103</sup> Bulk billers, of course, by using the lock box<sup>104</sup> of a bank for mail receipts, shift these risks to the bank operating the lock-box system. In the case of dividend checks or treasury checks, however, the delivery point is not a lock-box, and the risks identified above are present. The Code treats the indorsement of the payee's name in these cases as it does any other forged indorsement.<sup>105</sup> The employee relationship to the payee has not been made a ground for immediate risk shifting, although the suggestion has been made that, in the case of repetitive action, there should be a risk-shifting provision.<sup>106</sup> These risks in subsequent discussion herein will be called "Payee-Processing Risks."

The rules as to forged indorsements are also applicable when the check is raised in amount, except that if there is no break in the chain of indorsement, the paper is deemed to carry its original message.<sup>107</sup>

Once the payee has caused the paper message to be delivered to its bank, the risks are not over.

### D. Deposit-Taking Risks

The acceptance of the paper message for collection by a depository bank is the third locale of intrusion, the "Deposit-Taking Stage." Certain rules of law have developed based on a policy of reducing

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101. See, e.g., *Cooper v. Union Bank*, 9 Cal. 3d 371, 507 P.2d 609, 107 Cal. Rptr. 1 (1973).

102. See, e.g., *Greishaber v. Michigan Nat'l Bank*, 18 U.C.C. Rep. 1248 (Mich. Com. Pl. 1976).

103. The cash-out procedure in another context is described in *Kirby v. First & Merchants' Nat'l Bank*, 210 Va. 88, 168 S.E.2d 273 (1969) (Customer deposits at bank. The deposit slip of the customer first states the full amount of the check, then there is an entry of "cash out" and the total at the bottom is the difference. The court construed this as a final payment of the check by "cashing" and a deposit of the remaining cash was the intent of either bank or customer. When the check is returned for insufficient funds, the bank's remedy is breach of warranty, not right of charge back).

104. See note 41 *supra*.

105. See U.C.C. § 3-419(1)(c); *Cooper v. Union Bank*, 9 Cal. 3d 371, 507 P.2d 609, 107 Cal. Rptr. 1 (1973); *Mississippi Bank & Trust Co. v. County Suppliers & Diesel Serv., Inc.*, 253 So. 2d 828 (Miss. 1971); *Ervin v. Dauphin Deposit Trust Co.*, 84 Dauph. 280, 38 Pa. D&C2d. 473 (1965).

106. See, e.g., *Cooper v. Union Bank*, 9 Cal. 3d 371, 507 P.2d 609, 107 Cal. Rptr. 1 (1973), where the court found drawer negligence after six months of undetected forgery of the payee's signature. See also *Leary & Tarlow*, *supra* note 38, at 958 n.76 and accompanying text.

107. See U.C.C. § 3-407.

fraud and other wrongful intrusions by requiring a policing examination of checks when deposited. First, it is expected that checks will be examined for a regular chain of indorsements.<sup>108</sup> Human carelessness is recognized by section 4-205(1),<sup>109</sup> which allows the depository bank to supply its customer's indorsement, "which is necessary to title." Traditionally, this is done where the customer is the payee or, perhaps, is named in a special indorsement. Initially, loss from the forgery by one co-payee of the other co-payee's indorsement falls on the depository bank.<sup>110</sup> Section 3-304(2)<sup>111</sup> creates trouble when a check by a corporate check signer is taken in payment of that individual's debt, or as security for that debt.<sup>112</sup> A parallel rule of law applies even if the check is payable directly to the bank and is presented to it by anyone.<sup>113</sup> The first bank in a chain that handles such an item, except in payment of the drawer's debt or for deposit to its account, acts at its peril.<sup>114</sup>

Intrusion at the "Payee-Processing Stage," where the payee is a corporation, is also lessened by another rule of law, namely, that a check payable to a corporation is supposed to be deposited in the corporation's account.<sup>115</sup> Thus, where a check having a corporate payee is indorsed to another person, under section 3-304(1)(a)<sup>116</sup>

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108. See *American Bldg. Maintenance Co., Inc. v. Federation Bank & Trust Co.*, 213 F. Supp. 412 (S.D.N.Y. 1963) (depositor under no duty to examine returned checks for forged indorsement); *Wormhoudt Lumber Co. v. Union Bank & Trust Co.*, 231 Iowa 928, 2 N.W.2d 267 (1942) (bank's duty to determine genuineness of indorsement). In addition to the bank's duty of examination at the time an item is deposited, U.C.C. § 4-406 places a duty on the customer to examine his monthly bank statements and items for alterations. See text accompanying note 145 *infra*.

109. U.C.C. § 4-205(1).

110. See *Insurance Co. of N. Am. v. Atlas Supply Co.*, 121 Ga. App. 1, 172 S.E.2d 632 (1970) (bank breached its statutory warranty by accepting checks payable to two persons jointly and endorsed by only one). *But see Mueller v. Fidelity-Baltimore Nat'l Bank*, 226 Md. 629, 174 A.2d 789 (1961) (bank held not liable for cashing checks on which husband had forged his co-payee wife's signature, on the ground that since the wife had signed away her rights in the estate money that the checks represented, she was not damaged).

111. U.C.C. § 3-304(2).

112. See, e.g., *McConnico v. Third Nat'l Bank*, 230 Tenn. 874, 499 S.W.2d 874 (1973); *Swiss Baco Skyline Logging Co. v. Haliewicz*, 18 Wash. App. 21, 566 P.2d 1264 (Ct. App. 1977) (no notice of claim on instrument because corporation was not a designated payee).

113. The rule stems from *Sims v. United States Trust Co.*, 103 N.Y. 472, 9 N.E. 605 (1886), an early New York case. A recent New York case tempered the harshness of the rule by applying the U.C.C. § 4-406(1)-(2) rule in favor of a depository bank. *Federal Ins. Co. v. Groveland State Bank*, 37 N.Y.2d 252, 333 N.E.2d 334, 372 N.Y.S.2d 18 (1975).

114. See *Sun n' Sand, Inc. v. United Cal.*, 21 Cal. 3d 671, 148 Cal. Rptr. 329, 582 P.2d 920 (1978).

115. See *Titan Air Conditioning Corp. v. Chase Manhattan Bank*, 20 U.C.C. Rep. 1234 (N.Y. Sup. Ct. 1977) (bank held not to have observed ordinary commercial standards when it allowed an employee to deposit forged checks, payable to the employer's corporate suppliers, in the employee's personal account).

116. U.C.C. § 3-304(1)(a).

the instrument is "so irregular as to call into question its validity," and the depositary bank takes the instrument at its peril. The rule may well be extended to the case where the payee's name indicates that the payee is an organization to which the same policy of depositing and then drawing its own check in payment of its obligations should apply.<sup>117</sup> The legal effect of these rules is to prevent the bank from asserting the negligence of a corporate payee or taking advantage of the "innocent agent" rule of section 3-419(3),<sup>118</sup> if that rule really has any remaining vitality.<sup>119</sup> The rule will also prevent a bank from asserting a holder in due course status if the corporate indorsement is genuine, but the corporation has a defense against its indorsee since the rule is founded on section 3-304<sup>120</sup> dealing with what constitutes a notice of a defense.<sup>121</sup>

Finally, a depositary bank is in for trouble if it accepts a check from an apparent holder where the indorsement prior to its holder's is a restrictive indorsement.<sup>122</sup> That term includes not only the "for deposit," "for collection," or "pay any bank" indorsement, but also includes an indorsement "for the benefit or use" of a named person not necessarily the indorser.<sup>123</sup> The trouble varies with the type of indorsement, but does not extend beyond the depositary bank due to section 3-206(2)<sup>124</sup> and its companion section 4-205(2).<sup>125</sup> When the restrictive indorsement is a collection type, the depositary bank takes at its peril. Where the indorsement is the trust type, for the benefit of someone other than the indorsee, then the rules relating to dealing with fiduciaries come into play, but require the depositary bank to have knowledge that the fiduciary is negotiating for his own benefit or otherwise in breach of duty if it is to be held liable on the

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117. The authors have not found a case to this effect, but the name of a corporation should not have a different effect from that of any other business or charitable organization.

118. U.C.C. § 3-419(3).

119. See J. WHITE & R. SUMMERS, UNIFORM COMMERCIAL CODE § 15-4, at 505 (1972).

120. U.C.C. § 3-304.

121. One is not a holder in due course if taking with notice of a defense, U.C.C. § 3-302(1)(c), although a defense need not be *the* defense to destroy the requisite good faith requirement.

122. See *Underpinning & Foundation Constructors, Inc. v. Chase Manhattan Bank*, 46 N.Y.2d 459, 386 N.E.2d 1319, 414 N.Y.S.2d 298 (1979) (indorsement "effective" under U.C.C. § 3-405(1), but was "for deposit." Hence depositary bank liable to suit by drawer).

123. U.C.C. § 3-205(c)-(d).

124. U.C.C. § 3-206.

125. U.C.C. § 4-205(2). Both sections provide that intermediary or payor banks which are not the depositary bank are not "given notice nor otherwise affected by a restrictive indorsement," unless the indorsement is that of "the bank's immediate transferor." Section 3-206(2) adds "or [that of] the person presenting for payment."

instrument.<sup>126</sup> Banks should not overlook the possibility that by analogy to the corporate-payee rule just discussed, courts may make the bank liable where the fiduciary does not use a separate fiduciary account.

### E. Bank-Transmission Risks

At the fifth locale are the risks in the bank-transmission process: physical destruction of the paper by the physical sorting machines, the problem of misencoding by the first bank encoding the amount,<sup>127</sup> and loss or delay in transit between banks.<sup>128</sup> In general, the scheme of the U.C.C. is to allocate these risks to the creditor taking the paper in conditional payment unless a special agreement for a different allocation is made. Section 3-802(1)(b)<sup>129</sup> provides that where an instrument is taken for an underlying obligation, *i.e.*, in conditional payment, the underlying obligation is suspended until presentment. It further provides that discharge of an obligor on the instrument is a discharge on the obligation. Recognizing the usual concept of conditional payment, the section also provides that if the instrument is dishonored the creditor may sue either on the instrument or on the underlying obligation.<sup>130</sup>

The time in which the creditor must act to preserve the liability of an indorser is a reasonable time. In the case of an uncertified check drawn and payable within the United States, such reasonable time is presumed to be seven days after the indorsement.<sup>131</sup> The specified action of the creditor is either to present for payment or to initiate bank collection. The effect of delay in taking the designated action is to discharge the indorser absolutely. According to section 3-503(2)<sup>132</sup> as worded, the initiation of bank collection ends the running of the seven-day period, and both depositor and prior indorsers

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126. See U.C.C. § 3-304(2); *St. Stephen's Evangelical Lutheran Church v. Seaway Nat'l Bank*, 38 Ill. App. 1021, 350 N.E.2d 128 (1976) (bank was protected by its lack of knowledge that the fiduciary breached his obligation and absence of bad faith on the part of the bank).

127. Misencoding has created problems, but significant case law has not yet developed. Despite misencoding, the check's original amount controls. *First Nat'l Bank & Trust Co. v. Georgia R.R. Bank & Trust Co.*, 238 Ga. 693, 235 S.E.2d 1 (1977) (underencoding); *Gabalac v. Firestone Bank*, 46 Ohio. App. 2d 124, 346 N.E.2d 326 (1975). Cf. *Exchange Bank v. Florida Nat'l Bank*, 292 So. 2d 361 (Fla. 1974) (misencoding of routing symbol). Some clearinghouses have specific rules. See Rules and Regulations of the Los Angeles Clearing House §§ 4.04-4.10.

128. See U.C.C. §§ 4-108, 4-202(1)(e).

129. U.C.C. § 3-802(1)(b).

130. Yet when payment is made, the time of payment is deemed to relate back to the time the creditor takes the check. See, *e.g.*, *Cornell v. Stimson Lumber Co.*, 91 Or. 1099, 477 P.2d 898 (1970).

131. U.C.C. § 3-503(2)(b).

132. U.C.C. § 3-503(2).

remain at risk during the collection period. There is no fixed time limit thereafter, except that each bank in the collection process acts in timely fashion if it forwards the item towards the payor bank after receipt of the paper message or a notice concerning it, within its midnight deadline.<sup>133</sup> Action within a longer time may be reasonable, but the bank has the burden of proving the reasonableness of the time taken.<sup>134</sup>

In any event, there seems to be no rule fixing any time limits for transmission time between banks, except for section 4-204(1),<sup>135</sup> which merely requires the collecting bank to use ordinary care to send items by a reasonably prompt method considering the circumstances.<sup>136</sup> Further, section 4-103(5)<sup>137</sup> prescribes the measure of damages, absent bad faith, for failure to exercise ordinary care, specifically, the face amount of the item reduced by whatever could not have been collected even if ordinary care were used.

Thus, the cost of the loss of the use of funds resulting from transmission delays is borne by the creditor in cases where the item is paid by the drawee bank since, between debtor and creditor, the day of payment is the day the creditor voluntarily accepted the instrument.<sup>138</sup> However, if the item is eventually returned unpaid for reasons constituting dishonor, the creditor is returned to unpaid status by the removal of section 3-802(1)(b)'s suspension, in which case the debtor is liable for interest from the due date, which amounts to the debtor's absorbing the cost of the loss of the use of funds.

#### F. *Process-of-Posting Risks*

Our sixth locus of risks lies in the processing of the message by the payor bank which we can call "Process-of-Posting Risks." We can divide these into account-insufficiency risks and processing-error risks. The former result from a lack of sufficient balance, caused by factors ranging from a sufficient balance rendered insufficient or unavailable by the service of process, receipt of a notice of bankruptcy or death, or of an adjudication of incompetency, to the timely exercise of

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133. See U.C.C. § 4-104(1)(h).

134. See U.C.C. § 4-202(2). U.C.C. § 4-108(2), however, excuses delay caused by *force majeure* conditions.

135. U.C.C. § 4-204(1).

136. Cf. *Port City State Bank v. American Nat'l Bank*, 486 F.2d 196 (10th Cir. 1973) (new computer breakdown, excuse granted); *but cf.* *Blake v. Woodford Bank & Trust Co.*, 555 S.W.2d 589 (Ky. 1977) (breakdown of posting machines and absence of bookkeeper during Christmas no excuse where such were foreseeable); *Sun River Cattle Co. v. Miners Bank*, 164 Mont. 237, 521 P.2d 679 (armored car breakdown no excuse).

137. U.C.C. § 4-103(5).

138. See note 130 *supra*.

a set-off by the payor bank.<sup>139</sup> Also, the drawer may have placed a stop order against the particular paper message.<sup>140</sup> A processing-error risk could be a wrongful dishonor by the payor bank, or a return unpaid for an otherwise valid reason after the payor bank has become accountable by completing the process of posting.<sup>141</sup> It must be remembered that until a payor bank has become accountable it is not liable on the paper message,<sup>142</sup> although it may be liable in contract in proper circumstances.<sup>143</sup> The effect of a late return by an accountable payor bank on section 3-802's<sup>144</sup> suspension of obligation provisions has not yet, to the authors' knowledge, been litigated.

### G. Post-Payment Risks

Finally, as between the drawer and the payor bank, certain risk allocations are changed if the drawer fails to use reasonable care to examine the periodic statement and discover an unauthorized signature or alteration of an item and notify the bank thereof.<sup>145</sup> The effect of the failure is to preclude the customer from placing the loss on the bank if the bank paid in good faith and can prove the lack of notification caused it a loss, unless the customer establishes lack of ordinary care on the part of the bank in paying the item. More important from a practical point of view is the preclusion under section 4-406(2)(b)<sup>146</sup> of recovery for repetitive unauthorized signatures or alterations by the same person when the first is not reported within a reasonable time not exceeding fourteen days after the statement is made available to the drawer. The bank must show its payment in good faith but need not show that the failure to report caused the loss. The loss on the subsequent forgeries or alterations is shifted to the bank if the customer-depositor is able to establish lack of ordinary care on the part of the bank in paying the items.

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139. See U.C.C. § 4-303.

140. See U.C.C. § 4-403.

141. See U.C.C. §§ 4-213(1)(c), 4-109.

142. The lack of accountability of the drawee on the instrument is provided for in U.C.C. § 3-401(1), which states: "No person is liable on an instrument unless his signature appears thereon." U.C.C. § 3-409(1) provides "the drawee is not liable on the instrument until he accepts it." U.C.C. 3-410(1) provides "[a]cceptance is the drawee's signed engagement to honor the draft as presented. It must be written on the draft, and may consist of his signature alone. It becomes operative when completed by delivery or notification." But note when the payor bank becomes what the Code calls "accountable", see, e.g., U.C.C. §§ 4-213(1), 4-302, and does not remit, or having remitted, gains recredit by a late return, the action for accountability is not on the instrument, but is for the "accountable" liability.

143. As by issuing a letter of credit, see U.C.C. §§ 5-101 to -117, or by reason of an estoppel.

144. U.C.C. § 3-802.

145. See U.C.C. § 4-406.

146. U.C.C. § 4-406(2)(b).

V. ALLOCATION OF RISKS IN CHECK TRUNCATION—U.C.C.  
OR AGREEMENT

We shall now reexamine the proposed Pilot, in which only the MICR line is transmitted between banks, in light of the foregoing all-too-brief summary of risk allocation in the paper message process, to see what might be the proper allocation of risks and how that allocation might be accomplished.

We can assume that in the case of dividend and U.S. Treasury checks to which the Pilot is limited, the drawer, the payor bank, and the participating banks will settle their respective rights and liabilities by agreements that give them much the same protections and allocate risks among them substantially as they are allocated by the U.C.C. For instance, as demonstrated in *Perini Corp. v. First National Bank*,<sup>147</sup> a drawer can, by contract, assume liability for its unauthorized signature when a check-signing machine is used. A corporation participating in the Pilot could excuse its payor bank from any duty to examine signatures where electronic payment is made. Thus, the payor bank, under a proper contract, would not be liable for paying on the transmitted MICR line. Under the Pilot the drawer could transmit to the payor bank (if in the dividend situation the payor bank were not the drawer itself) a list of check numbers and amounts. If so agreed, a verification check could be made against the list and a nonpayment notice sent to the first safekeeping bank within the payor bank's midnight deadline if the transmitted MICR line did not coincide with one on the list, or drawer and drawee could ride the risk of alteration or forged drawer's signature. The first safekeeping bank would, on receipt of notice of nonpayment within its applicable time limit, retrieve the paper message and return it dishonored to its transferor, reversing the conditional credits given.

The payor bank's contract with the drawer should provide that the drawer will bear the risk of any padding by employees of the drawer of the number or amount of the checks to be issued. In other words, by contract, the "Origination Risks" can be allocated so that losses therefrom will be borne in the same manner that like losses are borne when the paper message has been processed as paper all the way, except that unauthorized additions to the list of issued checks transmitted to the bank would throw the loss on the preparer of the list. The latter would not be the case if the drawer's signature were forged on a check collected entirely by the paper system, but is, today,

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147. 553 F.2d 398 (5th Cir. 1977). See note 86 *supra*.

the case under the usual bank-required corporate resolution<sup>148</sup> if a check-signing machine is used.

While participants may allocate risks by contract, the "Payee-Processing Risks" and the "Nonbank-Transmission Risks" cannot be so allocated as against nonparticipating payees and indorsers. Nor can that contract change the indorsers' rights to speedy presentment and prompt notice of dishonor as conditions precedent to their guaranty liability. The indorsers' contracts to take up any unpaid instrument will be made on a paper check subject to Articles 3 and 4. That liability is conditioned on a presentment.<sup>149</sup> An issue, therefore, is whether an electronic transmission of the MICR line is a good presentment. It will also be important to identify the place and time of presentment since the midnight deadline of the payor bank will be computed from when the demand for payment reaches that place.<sup>150</sup>

Section 3-504(1)<sup>151</sup> defines presentment as a "demand for . . . payment made upon the . . . drawee . . . by or on behalf of the holder." Since the message started as a paper check in our supposed system, the first safekeeping bank will ordinarily be a holder of that item unless a "Deposit-Taking Risk" occurs to deny it that status. Under the Pilot the transmitted MICR line will be understood by all to be a demand for payment. It is clearly made to the person designated to pay and could be made through the Automated Clearing House (hereinafter ACH) networks.<sup>152</sup> Provisional credit will have been given by the first safekeeping bank to its creditor, and provisional credits will have been given to that bank according to the rules of the ACH. Upon a refusal to pay, the credits will, of course, be reversed.

Comment 1 to section 3-504 specifically states that the section makes "it clear that any demand upon the party to pay is a presentment no matter where or how."<sup>153</sup> In the discussions before the American Law Institute and the National Conference of Commis-

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148. See the resolution *quoted in* note 86 *supra*.

149. See U.C.C. § 3-414.

150. See, e.g., *Farmers & Merchants Bank v. Bank of America*, 20 Cal. App. 3d 939, 98 Cal. Rptr. 381 (1971) (presentment occurred when check was delivered to computer center, not to branch on which drawn); *Capital City First Nat'l Bank v. Lewis State Bank*, 341 So. 2d 1025 (Fla. Dist. Ct. App. 1977) (where Bank B did Bank A's computer work, presentment occurred when check reached Bank B's Proof and Transit Department). Cf., U.C.C. § 4-204(3) ("Presentment may be made by a presenting bank at a place where the payor bank has requested that presentment be made").

151. U.C.C. § 3-504(1).

152. In 1978 the Federal Research System's wire network connected all Automated Clearing Houses electronically so that the ACH system may now be used for electronic payments on a national scale. See Kutler, *Fed. ACH Plan Would Remove Last Block to Nationwide EFT*, *American Banker*, Feb. 21, 1979, at 1.

153. U.C.C. § 3-504, Comment 1.

sioners on Uniform State Laws, the statement was often made that the demand could be made in a hotel washroom. However, a question arises whether presentment is made when and where the demand is uttered or when and where the utterance is heard or received by the party to pay. Here a guiding principle may be drawn from section 3-504(2)(a),<sup>154</sup> which provides, in the case of a mail presentment, "the time of presentment is determined by the time of the receipt of the mail." From this we can also deduce that the place of presentment is the place to which the mail is sent. Thus, in the case of presentment by sending the MICR line electronically to the payee, the place of presentment would be the place to which the message was dispatched, and the time of presentment would be the time of receipt.

"Any demand anywhere"<sup>155</sup> is subject to the rights of the person to whom presentment is made under section 3-505,<sup>156</sup> namely, to require exhibition of the instrument, identification of the presenter, evidence of authority, production of the instrument, and a signed receipt on the instrument.

Two points can be made as to the effect of section 3-505. First, the rights are those of the payor. By participating in the Pilot, the payor has agreed not to assert these requirements. They are requirements for the protection of the payor, which can be waived by the payor. Second, should the payor assert any of the requirements of section 3-505, then, under subsection (2), the presenter has a reasonable time to comply with the requirement, and the time for payment runs from the time of compliance. Participation in the program should expedite the time of finality of payment in the great majority of cases. Hence, if the presenter's compliance with a payor bank's demand requires time by the first safekeeping bank beyond its midnight deadline, the benefits of the large number and the possibility of benefit in the particular case should, under section 4-204(2),<sup>157</sup> carry the burden of showing the reasonableness of the longer time elapsing before the physical forwarding of the paper message.

Indeed, the Pilot could benefit from the little-used subsection (4) of section 3-507,<sup>158</sup> which allows a sight draft (and a check is a sight draft drawn on a bank)<sup>159</sup> to contain a term allowing a stated time

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154. U.C.C. § 3-504(2)(a).

155. This is the authors' paraphrasing of the language found in U.C.C. § 3-504, Comment 1.

156. U.C.C. § 3-505.

157. U.C.C. § 4-204(2).

158. U.C.C. § 3-507(4).

159. A "check" within Article 3 is a negotiable instrument, signed by the drawer, containing an unconditional order to a bank to pay a sum certain in money on demand

for re-presentment in the event of any dishonor. Such a term gives the holder, and the first safekeeping bank is a holder, an option as against any secondary party bound by the term to waive the dishonor without affecting the liability of the secondary party, "and he [the holder] may present again up to the end of the stated time."<sup>160</sup> The Pilot's term could read:

Presentment of this instrument may be made by any bank by electronic transmission of its MICR line, and if payment is not made, the bank may, at its option and without discharging indorsers, re-present within seven days of its receipt of notice of any requirement of the drawee for additional action.

It could be argued that section 3-505's requirements may be asserted "without dishonor"<sup>161</sup> and that the re-presentment provision of section 3-507(4) is conditioned on dishonor. The greater, we are told in Euclidean Geometry, includes the lesser; accordingly, re-presentment to comply with a payor's demand could be included in a re-presentment after a refusal to pay. The term on the instrument is binding on the indorser if the term is a part of the instrument as issued, by analogy to the terms of section 3-511(6),<sup>162</sup> where a waiver of presentment embodied in the instrument is binding upon all parties.<sup>163</sup>

Section 4-102(1)<sup>164</sup> provides that to the extent items within Article 4 are also within the scope of Article 3, they are subject to the provisions of Article 3, but, if there is a conflict, Article 4 governs Article 3. Thus, if we have concluded that the transmission of the MICR line is a good presentment under Article 3, an issue is whether any provision in Article 4 conflicts with that conclusion.

Section 4-204(1) requires that "[a] collecting bank *must* send items by a reasonably prompt method taking into consideration . . . [among several other things] the method generally used by it or others to present such items" (emphasis added). Thus, if the method of presentment used under the Pilot is electronic demand of all items qualifying under the program, section 4-204(1) should not be read as requiring a physical sending of the paper item. Subsection (2) of section 4-204 seems permissive since it uses the word "may." This conclusion is buttressed by two facts. First, the section does not pro-

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to order or to bearer. See U.C.C. §3-104. The definition of what is a bank, see U.C.C. §1-201(4) ("any person engaged in the business of banking"), is, today, far from helpful.

160. U.C.C. §3-507(4).

161. U.C.C. §3-505(1).

162. U.C.C. §3-511(6).

163. *Id.* Indeed, a waiver of presentment with a specific reservation of a right to notice if payment is refused, no matter how demand was made, could also be used.

164. U.C.C. §4-102(1).

vide for presentment over the counter by an authorized messenger, yet, historically, this is clearly a proper method of presentment and is what is expressly covered by subsection (c) of section 3-504(2). Second, Comment 4 to section 4-204 specifically states that the same language in section 3-504 is permissive.<sup>165</sup>

Subsection (3) of section 4-204 was added by the 1962 amendments.<sup>166</sup> It expands section 3-504(2)(c) by specifying that presentment by a presenting bank may be made at a place where the payor bank has requested that payment be made. The subsection was added out of an abundance of caution regarding the use of electronic, off-banking-premises, processing centers. Since presentment may be defined as "any demand anywhere,"<sup>167</sup> it would not seem necessary to further specify the method of the demand again in the Pilot agreement except out of an abundance of caution.

Could an argument be made that section 4-210<sup>168</sup> on presentment by notice preempts the field and that an agreed electronically dispatched demand for payment from a bank cannot be made? The authors are of the opinion that quite the contrary implication should be drawn. As Comment 1 to section 4-210 states, the section merely codified a reasonable practice existing with respect to nonbank payors who had not agreed to the method of presentment. Its function is primarily to make specific the "reasonable time"<sup>169</sup> for compliance with any section 3-505 demands and to provide for the time of dishonor in case no response to the notice is received. There is nothing in the section or comment precluding a contractual arrangement between banks providing for a similar procedure for items drawn on banks.

Should any negative inference be drawn from the refusal of the sponsoring institutions to include in the Code a provision for electronic presentment drafted in 1949?<sup>170</sup> The proposed section was drafted in light of Western Union's then recently announced ability to transmit facsimiles of documents and pictures. For any volume, the unit cost, at

165. "Section 3-504 states how presentment is made and subsection (2) of that section affirmatively approves three specific methods by which presentment may be made. The methods so specified are permissive and do not foreclose other possible methods." U.C.C. § 4-204, Comment 4.

166. U.C.C. § 4-204(3).

167. See note 155 *supra*.

168. U.C.C. § 4-210.

169. U.C.C. § 3-505(2).

170. U.C.C. § 4-308(3)(C) (1950 proposed final draft) provides: "Forwarding and presenting are proper if done in any substitute manner agreed between the presenting and payor banks as by facsimile or other adequate demand for payment if the original item is forwarded within a reasonable time."

Section 4-308(3)(c), Comment 7 (1950 proposed final draft) provides: "Subsection (4) permits the use by agreement, of an equally expeditious means of collection including electronic facsimile transmission, or the use of coded cable or other form of demand."

that time, was unduly high. MICR encoding was in its infancy, and processing-sorting machines were still of the revolving drum type that recorded hand-punched amounts in push-button-selected compartments. The refusal to include in the Code what was considered a "Buck Rogers" idea should not be used to prevent a method of implementing, with today's technology, the concept of "any demand anywhere."<sup>171</sup>

Thus, the authors are of the opinion that the transmission of the MICR line to a payor bank that has agreed to that form of presentment is a sufficient presentment to charge indorsers on their contract liability without requiring either of the suggested waivers.

How will the Pilot affect "Origination Risks?" The drawer will have agreed to a charge to its account of the amount specified in the transmitted MICR line. The agreement will probably specify a right of charge back<sup>172</sup> if an intrusion at the "Nonbank-Transmission Stage" or the "Payee-Processing Stage" is later discovered, and the intrusion is one as to which, in the paper-message system, the risk of loss is not on the drawer.<sup>173</sup> Equally then, there should be a right of charge back if the risk upon intrusion at the "Deposit-Processing Stage" is one that the check rules allocate initially to the bank of deposit.<sup>174</sup> The right of charge back would be based on a contract among the participating banks providing that the presentment warranties of section 4-207<sup>175</sup> run directly to the drawer. This is an interpretation of that section that the California Supreme Court has already made where no special contract was involved.<sup>176</sup>

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171. See note 155 *supra*. A demand could be made from an executive's desk and sent within minutes to a bank across country by means of a facsimile device. Such devices have been in use in the United States at least since 1930, when Western Union Telegraph Co. began installing terminals in bus stations and apartment house foyers. Although those devices have been phased out, they have been followed by any number of desk-top transmitters/receivers that enable businesses to send facsimiles, within minutes, to distant locations electronically, thus expediting, among other things, customer orders, utility customer service orders, check stop payment orders, check signature verification, and auto financing. Most of the desk-top devices make use of existing telephone lines and can be leased or purchased. Among the leading companies marketing facsimile devices are Magnavox (Magnafax), Litton Industries (Messagefax), Shintron Co., Inc. (QIX), Xerox (Telecopier), Stewart-Warner Corp. (Datafax), and Western Union (Info-Fax). See D. COSTIGAN, *FAX: THE PRINCIPLES AND PRACTICE OF FACSIMILE COMMUNICATION* (1971).

172. The National Automated Clearing House Association already provides for a forty-five day period in which to reverse or correct erroneous transactions. G. White, *supra* note 7, at 41. This may be supported as a time period not manifestly unreasonable specified by agreement. This leaves the burden on the bank to prove loss caused by the delay in breach of warranty situations.

173. *I.e.*, extraction of check from mailbox of payee or by a mail opening, non-posting, or cash-out caper where payee negligence is not a defense.

174. The payee is a corporation or a bank. See text accompanying notes 112, 113, 114 *supra*.

175. U.C.C. § 4-207.

176. See *Sun 'n Sand, Inc. v. United Cal. Bank*, 21 Cal. 3d 671, 148 Cal. Rptr. 329, 582 P.2d 920 (1978).

A procedure for the production of the paper item, or a reasonable facsimile reproduction thereof, will be necessary to resolve disputes in which intrusions occur while the message is in paper form or in the original encoding of the amount on the MICR line and proof of the existence of any fact is necessary for establishing the right of charge back. Under the Pilot, it is proposed that the first safekeeping bank be literally that and will preserve the paper messages on file subject to retrieval for a limited period. Ninety days has been suggested. For claims asserted after that time the microfilm reproduction would be retrieved.<sup>177</sup> The destruction of the original check in the ordinary course of business should lay the foundation for the introduction of secondary evidence. Where the issue is forgery of a signature, the enlarged photographs made from microfilm may not be very satisfactory to handwriting experts,<sup>178</sup> but advancing technology undoubtedly will produce more accurate pictures.

The ninety-day period will, of course, run from the date the check is received by the first safekeeping bank. Drawer objection, based on wrongful payment due to misencoding, alteration of the paper message, or unauthorized message for which the drawer is not responsible, could be covered by a contract using the section 4-406<sup>179</sup> technique. The statement sent to the depositor, as many statements do today, will show the charges to the account not by date, but in the order of, and showing, the check numbers. The prompt examination and report rule<sup>180</sup> should apply. If an erroneous charge is not reported in time for a retrieval of the paper item from the first safekeeping bank, and the lack of the original paper message causes loss, the loss would be borne by the drawer.<sup>181</sup> Equally, the fourteen-day rule of section 4-406 (2)(b) could apply. The use of ordinary care in the comparison of check numbers and amounts with the issuer's list should prevent a section 4-406(3)<sup>182</sup> denial of the preclusion.<sup>183</sup>

It is questionable whether it is desirable to shorten the one-year and three-year absolute preclusions of section 4-406(4)<sup>184</sup> by contract

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177. See note 73 *supra*.

178. The authors have been informed by counsel involved in several cases that this happens. See *Girard Trust Corn Exch. Bank v. Brink's, Inc.*, 422 Pa. 48, 220 A.2d 827 (1966) (discussion of the illegibility of microfilm copies).

179. U.C.C. § 4-406.

180. See *id.*

181. The "agreement otherwise" provisions of the U.C.C., see *e.g.*, U.C.C. § 4-103(1), should allow a shortening of the time periods in U.C.C. § 4-406(1)'s "reasonable . . . promptness."

182. U.C.C. § 4-406(3).

183. The ability to fix, by agreement, the standards by which reasonable care is to be measured if such standards are not manifestly unreasonable supports this conclusion. See U.C.C. § 4-103(1).

184. U.C.C. § 4-406(4).

to a ninety-day period as to indorsements where presentment and payment are made on an electronically transmitted MICR line. A good argument can be made for a shortening of the one-year period as to all "Origination Risks" that could be detected by the drawer's comparison of the charges with his issuance records.<sup>185</sup> It is another thing to shorten the drawer's right to claim a recredit to his account based on a forged indorsement occurring in the "Nonbank-Transmission Stage" where the drawer remains liable to the payee. As Comment 5 to section 4-406 points out, the three-year limit was based on the assumption that:

in the great preponderance of cases the customer ["drawer"] will learn of the forged indorsements within this time and if in any exceptional case he does not, the balance in favor of a mechanical termination of the liability of the bank outweighs what few residuary risks the customer may still have.

The reasoning of the comment is not quite as impressive as it should be. While the drawer is precluded from a warranty claim after three years, where the statute of limitations applicable to the tort action of conversion, under 3-419(1),<sup>186</sup> is longer than three years there is no mechanical termination of the bank's liability, only of the drawer's rights.<sup>187</sup>

In any event, California has shortened the three-year notice period to one year without, apparently, causing any great distress among California check drawers.<sup>188</sup> Accordingly, a shortening of the present three-year notice period to a year by contract may not be manifestly unreasonable.<sup>189</sup>

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185. Especially where substantial corporate issuers are involved. Compare the shortening of the period in non-uniform changes in U.C.C. § 4-406, *see, e.g.*, CAL. U. COM. CODE § 4406 (West 1964) (one year to report unauthorized indorsement); GA. CODE ANN. § 109A-4-406 (1979) sixty days to report unauthorized signature or alteration on face of item; one year to report unauthorized indorsement or alteration on back of item; OHIO REV. CODE ANN. § 1304.29 (Page 1962) (one year to bring action against bank after reporting unauthorized signature or indorsement); WASH. REV. CODE § 62A.4-406(4) (1967) (sixty days to report unauthorized signature).

186. U.C.C. § 3-419(1).

187. *See e.g.*, GA. CODE ANN. § 3-1003 (1975) (four-year statute of limitation on conversion); ILL. ANN. STAT. ch. 83, § 16 (Smith-Hurd 1966) (five-year statute); PA. CONS. STAT. ANN. tit. 42, § 5526 (Purdon 1978) (six-year limitation on for liability founded on contract or instrument in writing (replaces PA. STAT. ANN. tit. 12, § 31 (Purdon 1953) (repealed 1978), which provided a six-year limitation for actions of trover).

188. CAL. U. COM. CODE § 4406(4) (West 1964).

189. *See, e.g.*, Webster Schott Bldg., Inc. v. Manufacturers Hanover Trust Co., 160 N.Y.L.J. Dec. 13, 1968, p. 16, col. 7 (Sup. Ct. N.Y.), *aff'd*, 32 App. Div. 2d 744 (1969) (clause upheld requiring notification within thirty days for any claim).

*See Allied Concord Financial Corp. v. Bank of America Nat'l Trust & Sav. Ass'n*, 275 Cal. App. 2d 1, 80 Cal. Rptr. 622 (1969) (where New York corporation had failed to give New York drawer bank notice regarding check payable to

The drawer should be able to assert a right to recover when an intrusion, undetected at the "Deposit-Taking Stage," has occurred and the intrusion is one in which, under the paper message system, the initial risk of loss is allocated to the depository bank. This occurs, for example, when there is a diversion of funds from the intended recipient when a known fiduciary negotiates a trust check in payment of his own debt, as security for his own debt, or otherwise for his own benefit.<sup>190</sup> It also occurs when a dividend check payable to a corporation is deposited to an individual's account bearing an unauthorized corporate indorsement.<sup>191</sup> Equally, in the last-mentioned type of intrusion, the corporate payee should be able to recover. We query whether in these cases a ninety-day section 4-406(4) type of preclusion by contract should apply to the drawer. The policy of preventing such frauds should be given more weight in the balance than a need for a mechanical termination of the liability of the bank in a ninety-day period, at least so long as the rule persists in the paper message system.

The misencoding problem (that is, where the bank places on the check in MICR print the amount of the check, but prints too high or too low an amount) has not resulted in much litigation. Whether the amount has been raised or lowered, the original-tenor concept should prevail; the item should be enforceable as to the correct amount and appropriate recoveries made, depending on the time and place of the message when the error was made. A contract representation or warranty of correct encoding will have to be developed, however, because when only the MICR line is forwarded electronically there is no accompanying indication of error in the encoding. Thus, where an overencoded amount is paid, the usual rule of finality of payment by a drawee should be deemed outweighed by the policy against unjust enrichment.<sup>192</sup> Equally, when the error is discovered, the subsequent

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California resident within California's one-year period, corporation could not require New York bank to reverse the charge to the corporation's account and could not recover from California depository and collecting banks on their warranties because of the time limitation). It is hard to understand why New York law was not applied, allowing the New York bank to reverse the charge, unless plaintiff's attorney did not plead and prove foreign law. *But see* *Bank of Thomas County v. Dekle*, 119 Ga. App. 753, 768 S.E.2d 834 (1969) (where the sixty-day notice period was not solely controlling); *see also* *Hartford Accident & Indemnity Co. v. Manufacturers Hanover Trust Co.*, 11 U.C.C. Rep. 365 (Sup. Ct. N.Y. 1972) (where bank and customer agreed that any action on a forged indorsement must be brought within eighteen months after the alleged forgeries).

190. *See* note 126 *supra*.

191. *See* note 115 *supra*.

192. Clearly a mistake has been made and the recipient has been unduly enriched, at least if the recipient is neither a holder in due course nor a person who in good faith as changed his position in reliance on the payment. The analysis of the interplay between U.C.C. §§ 3-418, 4-213 set forth in *Demos v. Lyons*, 151 N.J. Super. 489, 376 A.2d 1352 (Law Div. 1977) should be adopted here. Recipients of dividend payments and government payments should know their entitlements and

debiting of an account to which an underencoded amount has been charged should not be subject to drawer countermand. Legislation probably would be required to reverse depletion of the account by seizure under legal process occurring before the error is discovered.<sup>193</sup> Termination of authority to pay due to supervening bankruptcy, death, or adjudication of incompetence, presents a slightly different problem, and a good common law argument could be made in favor of the corrective debit.<sup>194</sup> An even stronger argument can be made where the act depleting the account balance is the payor bank's exercise of a right of setoff. The payor bank could, by its own contract, be liable to transmit a corrective amount notwithstanding a setoff taken after the debit of the underencoded amount. Any credits resulting from the setoff would be reversed.

Depletion of the account by payment on subsequently received messages, whether by other MICR transmissions or by paper check, so that the balance is less than the amount of the corrective entry, presents other problems. Clearly, the misencoding bank will be required to credit the proper amount to its customer. The drawer is liable to that bank as a holder for the full and correct amount. The issue then is whether the misencoding bank or the payor bank runs the risk of the drawer's inability to make good. On a fault basis, the bank actually making the misencoding seems to be the proper candidate for the loss, and the payor bank, never having had custody of the paper message, should not bear the loss.<sup>195</sup>

There would seem to be no problem with the usual "Process-of-Posting Risks." The section 4-303<sup>196</sup> priorities would operate, as would the section 4-302(a)<sup>197</sup> midnight deadline. Indeed, a clearing house rule could legally, and perhaps practically, accelerate the deadline to midnight of the day of the receipt of the electronic message,<sup>198</sup> unless banks still feel it necessary to have a large item, or other, review from next-day computer printouts.

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do not take overpayments in good faith. There will be a prompt outcry where underpayments are involved.

193. This assumes that the claim of error is made before a court officer has made a distribution of the funds. After distribution different equities may compel a different result.

194. Subject to the conclusion reached in note 193 *supra*.

195. Indeed, a warranty of correct encoding in the interbank agreements should settle issues of underencoding by making the underencoding bank liable if recovery from the drawer cannot be effected.

196. U.C.C. § 4-303.

197. U.C.C. § 4-302(a).

198. See *West Side Bank v. Marine Nat'l Exch. Bank*, 37 Wis. 2d 661, 155 N.W.2d 587 (1968). If an agreement can extend, it can also shorten.

## CONCLUSION

As the foregoing indicates, the Pilot does not eliminate a great many of the risks of the paper-message system. It is really only a within-banks electronic system, but a paper-message system outside of banks and at the deposit-taking stage. It remains a debit transfer system requiring provisional credits that later become final. Of course, the Pilot, limited to corporate dividend checks and U.S. Treasury checks, will not generate many return items. They should be 100% "good" items. But they will raise issues of the effect of intrusions into the payment process at the paper stage where those subsequently processing the message cannot be burdened with a duty to see the infirmities on the check, a basis on which some risk allocations in the present system are made.

One benefit should not be overlooked. The existence and effective use of the Pilot, if properly publicized, should accustom many payees to the ACH process. If the point of earlier availability of actual and finally collected funds is made, the publicity could lead to greater acceptance of the credit transfer capabilities that are now available, namely, the preauthorized credit system and the Giro-type transfers available in various electronic telephone payment capabilities. The latter system can grow only if a way can be found to eliminate the paperwork involved in the present telephone payment system where each recipient of payments has to authorize receipt in respect to each debtor. Could not a system be evolved whereby each payee, on the bills sent out, authorizes receipt of an electronic payment, stating the numerical designation of the receiving bank and the customer's account number? Would not consumer desire for a feeling of control over debits to the consumer's account be better satisfied if the consumer originated the debit order? Indeed, more consumers might be willing to authorize standing orders with respect to repetitive payments such as car payments, insurance payments, and home mortgage payments, since it is their order to their own bank that causes the payment to be made.<sup>199</sup>

From the corporate treasurer's point of view, the benefits of the Pilot may also be largely in the area of overcoming individual reluctance to accept payment through preauthorized credits, especially in dividend, bond interest, and payroll payments.

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199. The Final Report of the National Commission has stressed the consumer's psychological desire for maintaining control over the consumers finances. Rather than authorizing a creditor to initiate debits to the account, the telephone payment and standing order more nearly satisfy the desired feeling of control.

A danger to be watched lies in the possibility that a system geared to transmit only the MICR line on checks may be troublesome to adjust to the transmission of all the data required by the Fair Credit Billing Act<sup>200</sup> and the Electronic Fund Transfer Act<sup>201</sup> to be shown on a consumer's descriptive statement of account, if such statutes become applicable.

We can conclude where we began. The reluctance of many people to be among the first to try innovative things will always hold back the development of new payment systems. Each method has advantages for certain people or in certain applications. Thus, the plurality of payment systems will continue. Further, the banking requirement of paying for money borrowed in the form of demand deposits through services rendered makes it difficult for all but the largest and most sophisticated of corporate money managers to quantify just what benefits will accrue to their corporations from participation in new payment systems, whose most obvious effect is to speed up the receipt of actual and finally collected funds by others. The increasing velocity of funds transfers<sup>202</sup> also makes it difficult for banks to determine the value to them of corporate demand deposits in order to price explicitly the payment services rendered. We can, however, be sure that rising labor costs, coupled with the present high losses resulting from idle funds, will continue to exert pressure on the banking system to devise and market innovative means of reducing the costs of funds transfers while seeking explicit pricing of services.<sup>203</sup> Nevertheless, experience tells us that the check system will only fade; it will not die.

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200. See 15 U.S.C.A. § 1637 (West Supp. 1979).

201. See 15 U.S.C.A. § 1693d(a) (West Supp. 1979) (effective May 10, 1980).

202. Statistical measures such as *M-1* and *M-2* are based on a static picture, as of the end of a particular day. They do not take into account turn-over or the increasing velocity of transfers. The senior author has seen (confidentially) a study by one bank indicating a most dramatic increase in velocity as measured by the ratio of volume of debits to ending balances. The impact of E.F.T. may largely be felt in its impact on velocity.

203. The United States Senate and House of Representatives have passed separate bills, see S. 4986, 96th Cong., 1st Sess. (1979); H.R. 4986, 96th Cong., 1st Sess. (1979), which permit payment of interest on demand deposits. It is expected that this will result in some charges for handling checks since in 1978 demand deposits in commercial banks at \$369 billion were 38.4% of the total deposits of \$1,061 billion, but only 23.4% of the \$1,575 billion on deposit in all depository institutions. Of the demand deposits, only \$95 billion represented consumer deposits, or 9.89% of total bank deposits. Since corporations have long paid for services through compensatory balances, the impact of unbundled pricing may not be as serious as some have indicated.