

UNIFICATION OF PAYMENTS LAW AND THE PROBLEM OF INSOLVENCY RISK IN PAYMENT SYSTEMS

JAMES STEVEN ROGERS*

INTRODUCTION

A century ago, or even fifty years ago, no one spoke of the law of “payment systems.” That was because there really was only one commercially significant payment system—the check system. The law governing the check system was based on the long-existing law of bills and notes, supplemented by case law, and then statutes, governing the process of check collection.¹ With the widespread enactment of the Uniform Commercial Code (U.C.C.) in the 1960s, the law of the check system was largely governed by a uniform body of law set out in Articles 3 and 4.²

In the second half of the twentieth century, this simplicity evaporated. As the credit card system developed, federal law—prompted largely by concerns about the credit extension aspect of the device—came to deal with certain aspects of the use of credit cards as a consumer payment system.³ Similarly, the development of various electronic banking systems—initially such simple devices as ATM cards—prompted the enactment in 1978 of the federal Electronic Fund Transfer Act (EFTA), which specified some aspects of consumer rights in electronic banking systems.⁴ In the late 1970s and early 1980s, the sponsors of the U.C.C. considered an ambitious plan to promulgate a law that would unify the private law of all payment systems—the proposed Uniform New Payments Code—but that project encountered considerable opposition and was ultimately abandoned.⁵ Instead,

* Professor, Boston College Law School.

1. On the pre-statutory law of check collections, see JOHN EDSON BRADY, *THE LAW OF BANK CHECKS* (1st ed. 1915). For a critical assessment of the principal pre-U.C.C. statute on the subject, see Wayne L. Townsend, *The Bank Collection Code of the American Bankers' Association*, 8 *TUL. L. REV.* 21, 236, 376 (1933–1934).

2. Unless otherwise noted, citations herein to the U.C.C. are to the current 2005 version, which includes Article 4A (1989) and the major revision revised version of Articles 3 and 4 (1990).

3. See 15 U.S.C. §§ 1642 (prohibition on unsolicited distribution), 1643 (limitation of cardholder liability for unauthorized use), 1666i (assertion of claims and defenses) (2000).

4. Electronic Funds Transfer Act, 15 U.S.C. §§ 1693–93r (2000).

5. See Fred H. Miller, *U.C.C. Articles 3, 4 and 4A: A Study in Process and Scope*, 42 *ALA. L. REV.* 405, 408–09 (1991).

a more modest set of revisions to Articles 3 and 4 was drafted, along with a new Article 4A on wholesale wire funds transfers.⁶

Since the 1990s, the fractionalization of payments law has only increased. From its humble origins as an access device for ATM transactions, the card now known as a “debit card” has developed into a major consumer payment system.⁷ In recent years, a variety of systems have developed by which consumers can pay their bills electronically. A consumer might authorize a merchant or utility to charge her bill to her credit card account. Or, the consumer might authorize the merchant or utility to charge her bill to her bank account. If so, the merchant or utility might obtain that payment in a variety of ways, such as by generating a remotely-created paper item⁸ or by initiating an Automated Clearing House (ACH) debit transaction.⁹ Or, the consumer might contact her own bank and direct it to make payment to the merchant or utility.¹⁰ Different bodies of law apply to these different ways of “paying the bill electronically.” I am sure that I am not alone if I confess that, even as a law professor who specializes in payments law, I usually have to stop and think for a while before I can sort out exactly how a certain “electronic payment” that I have authorized will actually be implemented and what body of law will govern it. I feel fairly confident that the average user is unlikely to realize the potential difference in legal rights that may flow from slight variations in the way a payment is made.¹¹

Thus, the time is ripe for a renewed consideration of whether unification of payments law is desirable and feasible. In this piece, I offer some general thoughts on those issues and then consider in detail one specific question: whether it is feasible to have a uniform law on the issues posed by the risk of insolvency of a payment system provider.

I. UNIFICATION—GENERAL ISSUES

It may be useful to begin by separating several different issues that are easy to conflate. First, there is the question whether the law of payment

6. *See id.* at 410–12.

7. *See* 1 DONALD I. BAKER, ROLAND E. BRANDEL & JAMES H. PANNABECKER, *THE LAW OF ELECTRONIC FUND TRANSFER SYSTEMS* ¶ 7.02 (2008).

8. *See* 2 BARKLEY CLARK & BARBARA CLARK, *THE LAW OF BANK DEPOSITS, COLLECTIONS AND CREDIT CARDS* ¶ 10.02[2] (2006).

9. *See* 1 BAKER, BRANDEL & PANNABECKER, *supra* note 7, ¶ 4.02.

10. *See id.* ¶ 10.02[3].

11. *See* Ronald J. Mann, *Making Sense of Payments Policy in the Information Age*, 93 *GEO. L.J.* 633, 634 (2005) (relating anecdote of a law faculty colleague who called Prof. Mann puzzled about why he did not have the same rights in paying by debit card as he would if he had paid by credit card).

systems should be set out in a statute or left to case law. In the context of commercial law, the consensus for between a half-century and a century has been that it is better to have these matters governed by a statute, particularly a uniform state statute or a federal statute, rather than leaving the matters to unguided judicial decisions with the attendant problems of variation in the law from state to state. The major countervailing concern is that a statute might be premature if, for example, a given payment system is so young that there has not been adequate opportunity to explore the potential legal issues, or if a system is still in such a state of flux that the adoption of a specific statute might impair otherwise desirable lines of evolution. For the most part, that is a bridge that has already been crossed. We already have numerous statutes that govern various payment systems. If a new system is developed, a large part of the legal work that needs to be done is today largely a matter of trying to decide *which* statute applies. The possibility that *no* statute applies is rarely a real issue.

Second, there is the question whether the governing law should be “regulatory” or should permit parties to specify their rights and duties by agreement. It is important to keep this question separate from the question whether the law should be statutory or case law. If a given subject is dealt with purely by case law, that case law might either generally enforce or refuse to enforce agreements on various matters within the field. Similarly, if the subject is dealt with by a statute, the statute might permit widespread variation by agreement¹² or might provide that most of its significant rules may not be varied by agreement.¹³ If the arguments for specification of the governing law by statute are compelling, it is simply a non sequitur to object that the subject should not be “regulated.” In other words, one question is whether the law should be statutory or case law; another question is what attitude the law should take toward the enforceability of agreements that alter the rights that parties would have absent such agreement.

Third, there is the question whether the law governing payment systems should be set out in one body of law, or whether a separate body of law should govern each separate payment system. Again, it is important to avoid confusion on this point. Saying that there should be a unified body of payments law is not the same thing as saying that all of the rules of that body of law should be the same for all payment systems. Suppose one concludes that a certain issue should be treated one way in one payment system

12. *E.g.*, U.C.C. art. 2.

13. Though this fact is not widely noted, the best example of such a pattern is U.C.C. Article 4A on wholesale wire funds transfers, which is profoundly hostile toward variation by agreement. See James Steven Rogers, *The Basic Principle of Loss Allocation for Unauthorized Checks*, 39 WAKE FOREST L. REV. 453, 479–84 (2004).

and another way in another payment system. In itself, that fact says nothing about whether the law of payment systems should be unified or diverse. All that conclusion means is that a different rule on that particular issue would be appropriate for different payment systems. Examples are legion of statutory regimes exhibiting that pattern. The obvious example is U.C.C. Article 9. Before the adoption of Article 9, separate bodies of law, mostly statutory, governed different security devices. It is universally regarded as one of the most significant features of Article 9 that it abandoned that pattern and adopted a unitary law for all forms of security devices.¹⁴ But Article 9 still has a variety of rules that distinguish between, for example, inventory versus equipment finance, or business versus consumer transactions. To be sure, if one concluded that virtually all, or even most, of the rules should be different for different payment systems, then it would make little sense to try to formulate a unitary body of law. But, it seems fairly implausible to suppose that is the case for payment systems.

Fourth, there is the problem of history. The hand of history lies very heavily on the law of payment systems. The obvious example is the law of the check system. As a matter of historical development, the law of the check system happened to have developed as a branch of the law of bills and notes. If one were to start from scratch, there would be little reason to adopt that pattern.¹⁵ The law of the check system has little to do with the law of promissory notes, and the pattern of treating checks as negotiable instruments produces the otherwise inexplicable division of the subject between Articles 3 and 4.

For a more detailed illustration of the impact of history, consider the example of “chargeback” rights. If one pays for goods or services with a credit card, one has the right to refuse to pay the credit card bill if the goods or services are unsatisfactory. By contrast, if one pays with a debit card, one has no such right. Why the difference? The answer is largely a matter of history. The chargeback right for the credit card system is set out in section 170 of the federal Truth in Lending Act (TILA). That statute was adopted in the early 1970s as a response to concerns about consumer rights in credit transactions. That was the tail end of the era in which the application of the holder in due course doctrine in consumer credit transactions

14. Prior to the 2001 revision, Article 9 drove home that point in section 9-102(2), which provided that Article 9 “applie[d] to security interests created by contract including pledge, assignment, chattel mortgage, chattel trust, trust deed, factor’s lien, equipment trust, conditional sale, trust receipt, other lien or title retention contract and lease or consignment intended as security.” The 2001 revision drops that provision, evidently believing that enough time had gone by for the profession to get the point.

15. See James Steven Rogers, *The Irrelevance of Negotiable Instruments Concepts in the Law of the Check-Based Payment System*, 65 TEX. L. REV. 929 (1987).

had been one of the most contentious issues of commercial law.¹⁶ The first version of the Federal Trade Commission rule that effectively abrogated the holder in due course doctrine in consumer credit sales was promulgated in 1971.¹⁷ When Congress was considering the bill that became TILA section 170, the fights over the holder in due course doctrine were very fresh in everyone's mind. The legislative history of section 170 makes it clear that the chargeback right for credit card users was adopted because Congress felt that a person who buys goods on credit with a credit card should have the same right to refuse payment if the goods were defective as a person who paid for the goods with a note.¹⁸ In contrast, by the time that EFTA was adopted in 1978, concern about the issue seems to have quelled to the point that, though the issue was the subject of some dispute,¹⁹ Congress did not feel the need to adopt an analogous reversibility right.

It is also worth remembering that at the time EFTA was adopted in 1978, nothing akin to the current "debit card" system had developed. So, at that time, the fact that TILA has a reversibility right and EFTA does not may not have seemed all that anomalous. After all, reversibility was not at issue when cards were used simply for getting cash from an ATM machine. But the development of the modern debit card system has now led us to the point that when one buys goods, one has a completely different package of rights depending on whether one pays with a credit card or a debit card.²⁰ It may well be that there would be no political compromise that could result in a uniform rule on reversibility for the credit card system and the debit card system. But it is important to realize that that is a political decision, rather than the product of some significant difference between the fundamental rules that should apply to these two different systems. Worse still, one should not point to such accidental differences between the rules that happen to have developed for different payment systems as a reason for concluding that uniformity is inherently undesirable.

Finally, and perhaps most importantly, there is politics. Even if the logical case for uniformity were compelling, it seems unlikely that anything will happen unless someone is willing to push for change, and is willing to spend the political capital to bring the issue to the attention of lawmakers.

16. See JAMES J. WHITE & ROBERT S. SUMMERS, UNIFORM COMMERCIAL CODE § 14-9 (West Group, Hornbook Series, 5th ed. 2000).

17. Preservation of Buyers' Claims and Defenses in Consumer Installment Sales, 36 Fed. Reg. 1211 (Jan. 1971). The current version of the rule is in 16 C.F.R. § 433 (2007).

18. See S. Rep. No. 93-278, at 3 (1973).

19. See NAT'L COMM'N ON ELECTRONIC FUND TRANSFERS, EFT IN THE UNITED STATES 49-51 (1977).

20. Indeed, the difference may be no more than whether one answers "debit" or "credit" to the question posed by the merchant when one hands over a card that is indistinguishable between the two.

The biggest obstacle here is likely to be the sense that “if it ain’t broke, don’t fix it.” The problem is deciding what counts as being broken. And, on this point, there is a problem of viewpoint. The people discussing whether payments law should or should not be unified are going to be people who are already familiar with payments law. Perhaps we should look at the issue from a different perspective. Consider law students learning the subject anew, or practicing lawyers and judges who confront an issue of payments law without having previously studied the subject in any detail. To them, the costs of the current pattern of disunity are significant.

Thus, while the ultimate issue may be a matter of politics, it is worthwhile for those of us who do study payments law in detail to consider the feasibility of unification. A major reason is that one simply cannot foresee what events might produce the moment when there is a political will, or political necessity, to deal with payments law. When that occasion presents itself, there will be little opportunity for long study and reflection. Rather, there is likely to be political pressure for some rapid “solution.” One of the events that might well yield such a moment is the insolvency of a major payment provider. As long as the payment system remains under the control of banks that are regulated and insured, the prospect of provider insolvency is unlikely to pose significant issues for users of the payment system. But suppose that a payment system develops in which an unregulated, uninsured entity incurs substantial obligations to payment system users. Suppose that provider becomes insolvent. One can be sure that Congress would feel significant pressure to “do something.” To a large extent, the issues posed by insolvency risk are regulatory matters rather than matters of the rights of users and providers of the payment system. There is, however, at least one set of issues the law of payment systems must deal with.

II. UNIFICATION—RISK OF PROVIDER INSOLVENCY

Any payment system is, in essence, a means by which one moves from a state where the person initiating the payment has a claim against its chosen bank (or non-bank payment system provider) to a state where the person receiving the payment has a claim against its chosen bank (or non-bank payment system provider). In the usual case, that is done to settle a claim that the person making payment owes to the recipient.²¹ For convenience, the parties will be referred to herein as the “Debtor” and the “Creditor.”

21. That might be a claim that arises at the same time as the payment transaction, such as a claim for goods sold or services provided at that time. Or, the claim might have arisen out of some other transaction antecedent to the payment, such as a loan of money or the provision of goods or services.

Suppose that Debtor makes a payment to Creditor using some payment device that, if all goes well, will result in a debit to an account that Debtor maintains with Debtor's bank or other institution and a credit to an account that Creditor maintains with Creditor's bank or other institution. All necessary steps are completed between Debtor and Creditor, but, between the time that the payment transaction is initiated and the time that it would have been completed, one of the institutions involved in processing the transaction becomes insolvent. The question then arises whether the payment transaction has proceeded to the point that Debtor's obligation to Creditor has been discharged, or whether Creditor can still proceed against Debtor to enforce the underlying obligation.

For much of the twentieth century, issues about the insolvency of a payment provider received little attention. The near universal coverage of governmental deposit insurance for bank deposits made it unlikely that a failure of a bank would affect users of the payment system. In the late part of the twentieth century, however, policy makers were forced to take the issue more seriously, as a consequence of increased attention to problems of systemic risk following in the wake of the infamous Herrstatt Bank failure.²² Today, as it becomes more and more likely that non-bank entities will play a significant role in the payment system, issues of insolvency cannot safely be ignored.

A. *Bank Notes and E-notes*

There is, in fact, a very long history in Anglo-American law on the issue of payment system provider insolvency. Let us cast our minds back to the beginning of the eighteenth century at the goldsmith's shop of Sir Stephen Evans in Lombard Street in London. Around noon one day, two men came into the shop, one an employee of a merchant named Fellows and the other an employee of a man named Ward. The merchant Fellows had an account with the goldsmith, or, as it would have been put at the time, Fellows "kept his cash with" the goldsmith Evans. Fellows owed money to Ward and had told his employee to go down to the goldsmith shop with Ward's employee and arrange to have the debt paid from the funds that Fellows had on deposit. At the shop, the goldsmith deducted the amount of the payment from Fellows's account and gave Ward's employee that amount in the form of a note issued by another goldsmith, Wallis, payable to a certain person or bearer. The next day, Ward's employee went to

22. See Joseph D. Becker, *International Insolvency: The Case of Herstatt*, 62 A.B.A. J. 1290, 1291 (1976).

Wallis's shop to receive payment of the note. Unfortunately, Wallis had become insolvent and did not open for business that day, though he had continued in business and paid his notes all of the previous day.

The case arising out of these events, *Ward v. Evans*,²³ came to be regarded as the leading case on whether taking a note for a debt amounted to payment. Chief Justice Holt ruled that there should not be a single uniform rule on the question. Rather, the outcome would turn on whether the note was taken in payment of a pre-existing debt or for a contemporaneous obligation, and whether the person who received the note acted promptly in endeavoring to collect it. As Holt put it:

I am of opinion, and always was (notwithstanding the noise and cry, that it is the use of Lombard-Street, as if the contrary opinion would blow up Lombard-Street) that the acceptance of such a note is not actual payment. I agree . . . that the taking a note for goods sold is a payment, because it was part of the original contract; but paper is no payment where there is a precedent debt. For when such a note is given in payment, it is always intended to be taken under this condition, to be payment if the money be paid thereon in convenient time. This note was demanded within convenient time, but if the party who takes the note, keep it by him for several days, without demanding it, and the person who ought to pay it becomes insolvent, he that received it must bear the loss; because he prevented the other person from receiving the money, by detaining the note in his custody.²⁴

Throughout the eighteenth and nineteenth centuries, the *Ward v. Evans* scenario was replayed over and again, and the law on whether taking a note amounted to payment of an underlying debt became extremely complex.²⁵

Although circulating bank notes are no longer common, the basic elements of that payment system may well reemerge in the form of "electronic notes" or "E-notes."²⁶ In an E-note system an issuer²⁷ would issue E-notes that are not represented by any definitive piece of paper but exist only in the form of some electronic packet of information. The E-notes could be used to make payment in various ways, and might circulate from party to party for an indefinite period of time before presentation to the issuer for redemption. The key feature of an E-note system is that it would permit

23. (1703) 92 Eng. Rep. 120 (K.B.). More extensive discussion of the case can be found in JAMES STEVEN ROGERS, *THE EARLY HISTORY OF THE LAW OF BILLS AND NOTES* 202–03 (1995) and James Steven Rogers, *The New Old Law of Electronic Money*, 58 S.M.U. L. REV. 1253, 1287–89 (2005) [hereinafter Rogers, *The New Old Law*].

24. *Ward*, 92 Eng. Rep. at 121.

25. See Rogers, *The New Old Law*, *supra* note 23, at 1287–300.

26. See *id.* at 1262–74.

27. The issuer might be a single bank or other entity, or a grouping of entities related by some form of contract.

real-time final transfers of the bank credit (or credit of a non-bank issuer) by transactions effected through a communication system outside the banking system. The transfer of the E-note from user to user would be both the beginning and the end of the payment transaction. In other modern payment systems, the user-to-user transaction initiates a transfer of bank credit that is actually effected by some other set of transactions in the settlement process. By contrast, in an E-note system, once the Debtor-to-Creditor transaction is completed, Debtor would no longer be the beneficiary of the credit represented by the E-note. At the same instant, Creditor would become the beneficiary of the issuing entity's credit.

As I have elsewhere argued,²⁸ the body of law that developed concerning bank notes in the eighteenth and nineteenth centuries may still retain vitality as applied to E-note systems. Though the old case law is quite messy on the effect of taking a note for a precedent debt,²⁹ the case law is quite clear that a person who sells goods or otherwise gives value in an immediate exchange for a bank note has accepted that bank note as a complete discharge of the underlying claim.³⁰ That principle would be quite helpful in E-note systems. The distinction between precedent and contemporaneous debts is, however, more troublesome. Even in the period of circulating bank notes, it proved bedevilingly difficult to apply that distinction with any consistency.³¹ Today, the problem is likely to be even worse. How would we decide whether payment of a regular periodic bill, such as a utility bill, should be treated as payment of a precedent or contemporaneous debt? Another aspect of the old law of bank notes may provide a more helpful approach. The *Ward v. Evans* principle that taking a note for a precedent debt effects only conditional payment developed as a general rule that applied to any kind of negotiable instrument. In the United States, however, a line of cases distinguished between bank notes and other notes.³² The notion was that whatever the right rule might be for other forms of instruments, taking a bank note for a debt amounted to final payment of the debt. That approach might be generalized into a principle that if an instrument—paper or electronic—exists for the purpose of operating as a payment device, and if it is used in a transaction where the transfer of the instrument from Debtor to Creditor is completed without any further contact with the financial system, then that transfer amounts to final payment.

28. See Rogers, *The New Old Law*, *supra* note 23, at 1262–74.

29. *Id.* at 1292–300.

30. *Id.* at 1289–92.

31. *Id.* at 1292–93.

32. *Id.* at 1294–300.

The central feature of both the old bank note system and possible modern E-note equivalents is that the transfer of the obligation of the issuer of the note from Debtor to Creditor occurs instantaneously, without any contact with the issuer or any other financial institution. In that respect, such systems are quite different from any of the commercially significant payment systems now in use or likely to evolve in the near future. In virtually all commercially significant payment systems, the transfer of bank or other issuer credit from Debtor to Creditor is not completed merely by the transaction between Debtor and Creditor. Rather, additional steps are required to adjust the records of the users' accounts with providers and the records of the accounts maintained among the providers. Accordingly, the law on whether the payment transaction has proceeded to the point that the underlying obligation has been discharged is necessarily more complex.

In examining discharge issues in modern payment systems, this article begins by considering the role of agreement and then examines the default rules of the two payment systems for which the most comprehensive body of private law has developed—Articles 3 and 4 of the U.C.C. for the check system and Article 4A of the U.C.C. for the wholesale wire funds transfer system. Finally, similar issues are considered for other payment systems.

B. Role of Agreement and Intent

One might say that the question whether initiation of a payment transaction results in discharge of the underlying obligation depends on the intent of the parties. There are aspects of that concept in the law of the check system and the wholesale wire funds transfer system. For the check system, the rules on discharge are stated in U.C.C. section 3-310, but are all subject to variation by agreement. Similarly, U.C.C. section 4A-406(d) provides that the default rules stated in that section may be varied by agreement between the originator and beneficiary.

One may distinguish two approaches to intent and agreement. First, one could simply say that whether initiation of a payment transaction discharges the underlying obligation depends on the intent of the parties. A bit of reflection, however, reveals the futility of that approach. In the eighteenth or early nineteenth centuries, it made sense to ask whether Debtor and Creditor intended initiation of the payment transaction to result in discharge of the underlying obligation. In a world in which notes issued by banks and other private organizations circulated as a form of currency, everyone realized that there was a real risk that the issuer of the note might

have failed prior to the transfer of the note. Accordingly, it was common for bank notes to circulate at a significant discount from their face value.³³

Today, however, the likelihood of an uninsured bank failure is so remote that users of the banking system rarely give the matter any thought. Indeed, the problem of insolvency of payment system providers is a significant problem precisely because the event is not something that people routinely consider. In that situation, it makes no sense to ask whether the parties did or did not intend the initiation of payment transaction to result in discharge even if the payment provider failed. The question would be, “What was your intention about something that you did not think about?” Even a lawyer ought to be able to realize that that makes no sense.

Accordingly, the legal rules must answer the question of discharge and must do so in a fashion that does not depend on an effort to discern the parties’ intention. A somewhat different question is whether, once those rules have been devised, the parties may vary the results of the rules by explicit agreement. There is probably no serious harm in giving effect to such agreements, provided that we are careful about what counts as the necessary agreement. In the first place, it is important to realize that the issue is a matter of rights between the users of the payment system. Accordingly, an agreement between a user and a provider should not be effective to alter the default rules on discharge.³⁴ Moreover, precisely because the issue is one that parties are unlikely to have thought about, we should be wary of giving effect to boilerplate provisions of agreements, even between Debtor and Creditor.

C. Checks

The check system is a debit transfer system—that is, the information and the funds flow in opposite directions. Debtor delivers a check to Creditor, but that step alone has no effect on the state of bank credit. Creditor initiates collection by depositing the check at a depository bank. The check is forwarded for collection to the payor bank. Only after presentment to the payor bank is any final decision made about whether the check will be

33. That risk was so real that weekly “bank note detector” publications were common. In the publications, one could find information on which banks had issued which denominations, which notes were likely to be counterfeits, which banks had failed, and what the market rate of discount was for the circulating notes of various banks. BENJAMIN J. KLEBANER, *AMERICAN COMMERCIAL BANKING: A HISTORY* 18–19 (1990).

34. That is the approach taken by U.C.C. Article 4A. Section 4A-406 states rules on when an underlying obligation is discharged by an Article 4A wire transfer. Subsection (d) provides that the rights of the originator or beneficiary may be varied “only by agreement of the originator and the beneficiary.”

paid. Because the check system is a debit transfer system, section 3-310 provides that taking an ordinary check for an obligation merely suspends the underlying obligation. Suspension continues until the check is either dishonored or paid. If the check is dishonored, the underlying obligation may be enforced. If, however, “payment” occurs, the underlying obligation is discharged. As used in section 3-310, the term “payment” presumably refers to “final payment” as described in section 4-215. Thus, to decide whether the underlying obligation has been discharged, we need to look to the rules in section 4-215 on final payment.

Section 4-215 states the rules on final payment in a fashion that makes the matter seem more complicated than it really is. Subsection (a) provides that the payor bank makes final payment when it has “paid the item in cash.” This, however, is a fairly unlikely scenario. In the routine check processing system, when checks are presented to the payor bank, the payor bank settles for them by making a provisional settlement, not by paying cash.³⁵

Subsection (b) of section 4-215 provides that a payor bank makes final payment if it has “settled for the item without having a right to revoke the settlement under statute, clearing-house rule, or agreement.” Though this appears on its face to be a rule describing situations where a payor bank might be held to have made final payment, the reality is the opposite because the payor bank will, in practice, always have a right to revoke any provisional settlement given for the item on presentment.³⁶

35. The only scenario that could conceivably trigger subsection (a) is when the holder of a check brings it to the payor bank and asks the bank to cash the check. Even in such cases, it is not really clear what is meant by the colloquial phrase “cash a check.” Suppose that the payee of a check takes it to her bank and asks if the bank will “cash” the check. The bank might well hand over cash, but ordinarily it will do so only if the payee’s account has sufficient funds to cover the amount of the withdrawal. The bank is simply doing two things at once: (1) taking the check for deposit, and (2) allowing its account holder to withdraw an equivalent amount from her account. Now, suppose that the check happens to be drawn on an account at the same bank where the payee maintains her account. Again the bank may hand over cash when it takes the check, but the analysis is presumably the same: the bank takes the check for deposit, and the bank withdraws an equivalent sum from the payee’s account. We would have a situation that could aptly be described as “paying” the check in the section 4-215 sense only if the payor bank was willing to “cash” it, either for a person who did not also keep an account at that bank or for a person who had an account with a balance less than the amount of the check. Experience suggests that it is fairly rare to encounter a bank that would be willing to do that. If, however, the payor bank does so, then the underlying obligation for which the check was taken will be discharged at the moment that the payor bank pays the check in cash. At that moment, the payor bank also acquires the right to charge the amount on the check to the drawer’s account. *See* U.C.C. § 4-401 (2005).

36. The comments to the current version of Article 4 are not particularly helpful in explaining why subsection (b) exists. The comments to the equivalent provision of former Article 4 are more helpful, for they indicate that the main point of this provision is to make it clear that by making an agreement “payor banks may without difficulty avoid the effect of” various pre-Code cases that had held that a payor bank had made final payment. U.C.C. § 4-213, cmt 4 (1989). In all of the cases cited in the former comment, a bank that was both payor and depository had done something that could be described as paying the check to the depositor before discovering that the drawer’s account did not have

Thus, the significant final payment rule is the subsection (c) rule that final payment occurs when a bank has “made a provisional settlement for the item and failed to revoke the settlement in the time and manner permitted by statute, clearinghouse rule, or agreement.” Clearinghouse rules, other law, or agreements may establish a shorter time, but the longest time for revocation of provisional settlement by a payor bank is set by section 4-301. Under that provision, a payor bank has only until its midnight deadline to revoke the provisional settlement made upon presentment.³⁷ Thus, in the routine case, the underlying obligation for which the check was taken will be discharged at the moment that the payor bank’s midnight deadline expires. At that moment, the payor bank also acquires the right to charge the amount on the check to the drawer’s account.³⁸

Putting these rules together, we see that when a payment is made by delivery of a check from Debtor to Creditor, the underlying obligation is discharged at the moment that the payor bank makes final payment. Because the check system is a debit transfer system, that cannot occur until Creditor has received the check and initiated collection. Thus, payment occurs when Debtor’s bank has charged the amount of the payment to Debtor’s account. At that same instant, Debtor’s claim against Debtor’s chosen bank is reduced by the amount of the check, and Creditor’s claim against Creditor’s chosen bank is increased by the amount of the check.

Under modern check collection procedures, the possibility of the insolvency of one of the banks involved in check collection is unlikely to pose any significant problems. In the routine modern check collection process, a provisional settlement is made at each stage of the check collection process for items at the time they are transmitted for further processing or for payment. Thus, even if one of the banks involved in collection of the check does fail, it is unlikely that the failed bank will have any unsatisfied obligations arising from the check collection process.

sufficient funds to cover the check. *See* *Cohen v. First Nat’l Bank of Nogales*, 198 P. 122 (Ariz. 1921); *Briviesca v. Coronado*, 120 P.2d 649 (Cal. 1941); *W.A. White Brokerage Co. v. Cooperman*, 290 N.W. 790 (Minn. 1940); *Scotts Bluff County v. First Nat’l Bank of Gering*, 212 N.W. 617 (Neb. 1927); *Provident Sav. Bank & Trust Co. v. Hildebrand*, 196 N.E. 790 (Ohio Ct. App. 1934); *Schaer v. First Nat’l Bank of Brenham*, 124 S.W.2d 108 (Tex. Comm’n App. 1939); *Union State Bank of Lancaster v. People’s State Bank of Lancaster*, 211 N.W. 931 (Wis. 1927). In those cases, the banks were unsuccessful in their efforts to recover the money from the depositor, because the courts ruled that the bank had made final payment. The effect of the rule now in section 4-215(b) is that banks can avoid any such risk by simply adding a provision to their deposit agreement providing that they have a right to revoke any money paid to a depositor for a check drawn by another customer so long as they act in a timely fashion.

37. Midnight deadline means midnight of the banking day following the banking day of presentment. U.C.C. § 4-104(a)(10).

38. *Id.* § 4-401.

It is, however, worth considering briefly what might happen if, although the payor bank has made final payment, an intermediary bank did not make a settlement for a check on the forward collection process and then became insolvent. Under section 4-215(c), at the instant that the payor bank makes final payment, all provisional settlements made on forward collection become final. Thus, the provisional settlement given to the payee by the depository bank will become final at that same instant. That will be so regardless of any arrangements that may have been made among the banks. Having made final payment, the payor bank will be entitled to charge the amount of the check to the drawer. Moreover, since final payment was made by the payor bank, the underlying obligation of the drawer to the payee is discharged under section 3-310(b)(1). Thus, the users of the check payment system would not face any risk from insolvency of an intermediary bank.³⁹

D. Wholesale Wire Transfers

The wholesale wire transfer system governed by U.C.C. Article 4A is a credit transfer system—that is, the information and the funds flow in the same direction. Suppose that Debtor is going to pay a debt owed to Creditor by an Article 4A wire transfer. Debtor (“Originator” in Article 4A parlance)⁴⁰ transmits a payment order to Debtor’s own bank (“Originator’s Bank”)⁴¹ directing that bank to cause the amount of the payment to be paid

39. If either the depository bank or the payor bank becomes insolvent, then, in the routine case, we would simply have a situation in which either the creditor’s chosen bank or the debtor’s chosen bank becomes insolvent after the payment is made. Theoretically, we might face a problem of provider insolvency risk if the process has proceeded to the point that the payor bank has become accountable for the amount of the item under section 4-302, but the payor bank has not settled for it. If this unlikely event were to occur, the outcome would presumably be as follows: The payor bank has become “accountable” for the item under section 4-302, but the payor bank has not made “final payment.” Accordingly, provisional settlements given by the depository bank to the depositor, and among collecting banks, do not firm up under section 4-215(c). Therefore, the depository bank may charge back any provisional settlement given to its customer under section 4-214. That leaves the payee (Creditor) with the check but no payment. Because the check has not been paid, the underlying obligation of Debtor to Creditor has not been discharged, and Creditor may proceed against Debtor either on the check or on the underlying obligation. U.C.C. § 3-310(b)(3). Creditor, however, also has the option of pursuing a claim against payor bank, which has become accountable for the check under section 4-302. It is not entirely clear whether the drawer’s account with payor bank can be charged. Section 4-401 provides that a payor bank may charge its customer’s account for “an item that is properly payable from that account.” It is not clear from that phrasing whether the account can be charged for an item that was properly payable, but was not in fact paid. Presumably the answer would be no, so Debtor would still have its claim against its bank. Yet, if Creditor seeks to enforce its 4-302 right against the payor bank, we would somehow have to say that the bank cannot be liable to both its own customer and the payee of the check.

40. U.C.C. § 4A-104(c).

41. *Id.* § 4A-104(d).

to Creditor (“Beneficiary”)⁴². In the routine case, Debtor and Creditor use different banks, so Debtor’s payment order transmitted to Debtor’s Bank will direct that payment is to be made to Creditor by a credit to the account that Creditor maintains with Creditor’s Bank (“Beneficiary’s Bank”)⁴³. Debtor’s Bank will execute Debtor’s payment order by transmitting another payment order either directly to Creditor’s Bank or to an intermediary for further transmission. If all goes well, the transaction will be completed when Creditor’s Bank learns of the transaction and credits Creditor’s account.

The funds transfer is initiated by Debtor, possibly without any action by Creditor. By contrast, in a debit transfer system such as the check system, the payment transaction cannot be initiated without action by Creditor. That difference is reflected in the rules on when payment of the underlying obligation is made. The general rule in section 4A-406 is that the underlying obligation is discharged at the time that the Creditor’s Bank becomes obligated to the Creditor.⁴⁴ Taken in isolation, that rule would seem to impose a significant risk on Debtor. Suppose that Debtor gives a payment order to Debtor’s Bank directing that funds be transferred to Creditor’s account at Creditor’s Bank. Suppose that, in the ordinary course of events, that funds transfer would have occurred through Intermediary Bank A and Intermediary Bank B. Debtor’s Bank debits Debtor’s account for the amount and transmits a payment order to Intermediary Bank A. Suppose that Intermediary Bank A charges an account of Debtor’s Bank for the amount of the payment, and Intermediary Bank A transmits a payment order to Intermediary Bank B. Intermediary Bank B charges an account of Intermediary Bank A, but, before Intermediary Bank B transmits any payment order to Creditor’s Bank, Intermediary Bank B becomes insolvent. Because Creditor’s Bank never received any payment order directing a credit to Creditor’s account, the underlying obligation of Debtor to Creditor has not been discharged under the rule of section 4A-406. Debtor’s account at Debtor’s Bank has, however, been charged for the amount of the payment. Thus, it looks as though Debtor is out of luck. Debtor has lost the money from its account, but Debtor still owes the underlying debt.

Imagine that Debtor goes to its own bank to complain. It would hardly be surprising if Debtor’s Bank said something along the lines of “Look, we

42. *Id.* § 4A-103(a)(2).

43. *Id.* § 4A-103(a)(3).

44. Subsection (b) of section 4A-406 provides that the underlying obligation is not discharged if the agreement between Debtor and Creditor prohibited payment by transfer to an account of Creditor at that bank. The point is that Debtor should not be able to force Creditor to take the credit of a bank that Creditor is unwilling to accept.

didn't do anything wrong. Sure, we charged your account, but our account was charged for the same amount when we sent the payment order to Intermediary Bank A. If you have a problem, go chase Intermediary Bank B. We certainly can't be liable if we did nothing wrong."⁴⁵ One of the striking things about Article 4A is that it unequivocally and emphatically rejects that argument by Debtor's Bank. Under the "money back guaranty" rule of section 4A-402(c), the obligation of Debtor to pay Debtor's Bank for the payment order that Debtor's Bank executed "is excused if the funds transfer is not completed by acceptance by the beneficiary's bank of a payment order instructing payment to the beneficiary."⁴⁶ No agreement between the Debtor and the Debtor's Bank can impose the risk of this loss on the Debtor, even though there was nothing that the Debtor's Bank could have done to prevent the loss. As I have elsewhere pointed out,⁴⁷ Article 4A adopts a profoundly hostile attitude toward variation by agreement—indeed, none of the significant rules can be varied by agreement. Section 4A-402(f) follows this approach, providing that the money back guarantee rule cannot be varied by agreement.

Once one takes account of the money back guaranty rule of section 4A-402, one sees that the effect of the discharge rule in section 4A-406 is quite different than first appears. If a funds transfer initiated by Debtor is not completed by credit to an authorized account of Creditor, it is true that the underlying obligation of Debtor to Creditor is not discharged. But, if that happens, then Debtor's obligation to its own bank will be excused, and Debtor will be entitled to a full refund of any amount that its own bank has charged. That will be true even though Debtor's Bank did not itself do anything wrong, and even though Debtor's Bank may suffer a loss as a result of the refund obligation.⁴⁸

E. General Rule

Let us consider how we might combine the approaches taken in the check system and the wholesale wire funds transfer system. Looking only at the check system, we might say that payment occurs when Debtor's Bank has charged the amount of the payment to Debtor's account. But that

45. Banks often say "we aren't liable" even when they did do something wrong, but that is another story.

46. If Debtor's Bank has already received payment from Debtor in such a case, Debtor's Bank is obligated to refund the amount to Debtor. U.C.C. § 4A-402(d).

47. See Rogers, *supra* note 13, at 479–84.

48. In the example here considered, the rule in section 4A-402 would mean that although Debtor's Bank is obligated to make a refund to Debtor, Debtor's Bank would have a right to refund from Intermediary Bank A, and Intermediary Bank A would have a right to refund from Intermediary Bank B.

works only because the check system is a debit transfer system. In such a system, Debtor's account at Debtor's Bank cannot be charged until Creditor has participated in initiating the funds transfer by receiving the check and depositing it for collection. So, by the time that Debtor's account at its own bank has been charged, Creditor's account at its own bank will have been credited. In a credit transfer system, such as the Article 4A wire transfer system, Debtor's account may be charged before Creditor has done anything about the payment transaction. So, it would not make sense to say that the underlying debt is discharged at the time Debtor's account with its chosen bank has been charged. Rather, in such a system the underlying debt is discharged only after the Debtor's account at the Debtor's chosen bank has been debited and the Creditor's account at the Creditor's chosen bank has been credited. We tolerate that rule only because of the money back guaranty rule: under that rule, the Debtor's account may not be charged if the Creditor's account at its chosen bank is not credited.

Let us step back a bit and combine these rules on discharge with reflections on the appropriate locus of the risk of payment provider insolvency. No rule of private law can eliminate the risk of provider insolvency. If a person chooses to maintain an account with a given institution, that person necessarily accepts the risk of that institution's solvency. So, to use our simple Debtor-Creditor example, before any payment transaction, Debtor takes the risk of the solvency of Debtor's Bank. After the completion of the payment transaction, Creditor takes the risk of the solvency of Creditor's Bank. Now, suppose that a payment transaction is initiated, but as a result of the insolvency of some intermediary institution, the payment transaction is not completed. Who bears the risk? For the check system, that is an unlikely scenario, since at each stage of the check collection process a provisional settlement is made for items at the time they are transmitted for further processing or for payment. Either the item is paid, in which case the settlements become final, or the item is not paid, in which case the settlements can be revoked. For the Article 4A wire transfer system, it is quite possible that a payment transaction will fail to be completed as a result of the insolvency of some intermediary institution. The approach taken to remedy that problem in Article 4A is quite instructive. Under the money-back guaranty rule of section 4A-402, the originating bank is obligated to refund to the originator any charge that it has made, and that obligation is in no way dependent on any wrongful or improper action by the originating

bank. In short, the risk of intermediary provider insolvency is borne by the providers of the payment system, not by the users of the payment system.⁴⁹

Now let us consider analogous issues about the burden of payment provider insolvency in other payment systems to see whether the approach we discern from the check system and the wire funds transfer system can be generalized to other payment systems.

F. *Credit Cards*

Ironically, despite the name “credit card,” the credit card system can be described as a debit transfer system. The cardholder (Debtor) initiates the payment transaction by giving the card, or the information from the card, to the merchant (Creditor). Creditor then makes the contact with the participating financial institutions to begin the process that, if all goes well, will result in a credit to Creditor’s account with its chosen institution and a debit to Debtor’s account with its chosen institution. Of course, in the credit card system the debit to Debtor’s account does not take the form of a charge to a bank account or other asset account, but an increase in the amount of cardholder’s liability account with the issuing bank.

When we looked at our prime example of a debit transfer system—the check system—we saw that the underlying obligation was not discharged until the Debtor’s account was charged. There is no explicit rule on this issue for the credit card system, but a moment’s reflection makes it obvious that the cardholder cannot be obligated to pay the underlying obligation. Suppose that Merchant accepts payment for a purchase made by Cardholder by credit card. Suppose that the Issuing Bank becomes insolvent before paying the amount of the charge to the Merchant Bank. Suppose further—though this is unlikely—that the agreement or rules of the credit card system permit the Merchant Bank to charge back the amount to the Merchant if the Issuing Bank fails. Does Merchant have a claim against Cardholder for the amount of the purchase? To be sure, when someone sells goods or services, he is entitled to payment on demand. But the whole point of the credit card system is to enable people to buy things that they cannot afford to pay for immediately. It must be the case, then, that the underlying obligation is discharged at the instant that the credit card transaction is initiated.⁵⁰

49. *Cf.* Rogers, *supra* note 13, at 466–67 (basic principle of loss allocation is that risk of unpreventable loss is borne by the providers of the payment system, not the users of the payment system).

50. Conceivably, one might reach a different answer if the card is used to pay for a precedent debt, as in the common scenario of a utility company that accepts credit card payments for bills for services rendered previously. Theoretically, one could say that if the card transaction is not completed as a result

That may, however, not really be significantly different from the check system. Note that about the only thing credit card slips now say is, in essence "I'll pay for these goods/services pursuant to my agreement with the issuing bank." So it makes sense to say that at the instant that the card transaction occurs between Cardholder and Merchant, Cardholder incurs an obligation to Issuing Bank.⁵¹ That is, there is an increase in the amount of Cardholder's debt to the Issuing Bank. At the same time, any obligation of Cardholder to Merchant is discharged.

Thus, the credit card system is generally consistent with the principles that were deduced above. It makes sense to say that as soon as the transaction is implemented between Debtor and Creditor, the underlying obligation is discharged and Debtor incurs an obligation to Debtor's Bank. It is a little harder to decide exactly when Creditor (Merchant) obtains a claim against its bank, because so much of the law of the credit card system is left to private agreement.

To begin with, there is a timing issue. Does Merchant obtain a right to payment from Merchant Bank at the instant that the transaction occurs between Cardholder and Merchant, or does Merchant acquire that right to payment only at the time the slips or other information are actually transmitted from Merchant to Merchant Bank and Merchant Bank credits Merchant's account? Assuming that the transaction with cardholder was conducted by Merchant in accordance with the agreements between Merchant and Merchant Bank, it makes sense to say that Merchant acquires a legal right to payment from Merchant Bank at the instant that the transaction is completed between Merchant and Cardholder. To be sure, the accounting entries that will be made to reflect the credit of Merchant's account at Merchant Bank may actually occur at a somewhat later moment, but it makes sense to distinguish the moment that Merchant acquires the right against Merchant Bank from the moment that the accounting entries are made reflecting that right.

Next, and more significant for present purposes, there is the question of the finality of Merchant's acquisition of a right to payment from Merchant Bank. First, suppose that Merchant Bank fails between the time that the transaction between Cardholder and Merchant occurred and the time that Merchant's account at Merchant Bank would otherwise have been credited. Does that failure affect Merchant's legal right to payment from

of the insolvency of one of the banks, Creditor still has a claim against Debtor, and Debtor has no obligation to the issuing bank.

51. That is a bit different from the check system, since it is possible that the drawer will not incur any obligation to the payor bank if the drawer makes an effective and timely stop payment order.

Merchant Bank? The answer should certainly be no. If, as discussed above, we conclude that at the instant of the transaction between Cardholder and Merchant, (i) Merchant's claim against Cardholder is discharged, and (ii) Cardholder incurs an obligation to Issuing Bank, then it makes sense to say that at that same instant Merchant obtains a final claim against Merchant Bank.

Second, suppose that Issuing Bank fails between the time that Merchant acquires a claim against Merchant Bank and the time that Merchant Bank would otherwise have acquired a claim against Issuing Bank. It certainly makes sense to say that Merchant Bank has a claim against Issuing Bank if Merchant Bank has incurred an obligation to Merchant. But could that result be changed by an agreement between Issuing Bank and Merchant Bank? Suppose that the agreement between Issuing Bank and Merchant Bank said that if Issuing Bank fails before actually crediting Merchant Bank, then Merchant Bank has no legal claim against Issuing Bank. That would make no sense. To be sure, Merchant Bank might not actually be able to collect any claim that it has against Issuing Bank, but it would be very odd to say that the legal obligation that Issuing Bank would otherwise have to Merchant Bank does not arise, or can somehow be reversed, if some obstacle arises to Issuing Bank's performance of that obligation. If, then, we conclude that it makes no sense to allow Issuing Bank to absolve itself of legal liability to Merchant Bank, that should also resolve a further question. Could the agreement place the risk of Issuing Bank's solvency on Merchant (rather than Merchant Bank) by (i) providing that if Issuing Bank becomes insolvent, Merchant Bank has no claim against Issuing Bank, and (ii) if that occurs, Merchant Bank is not obligated to Merchant and can reverse any credit previously given? Allowing the agreement to do that would not only make no sense as between Issuing Bank and Merchant Bank, but would further mean that the risk of solvency of Issuing Bank rests with Merchant, who had no dealings with Issuing Bank and no opportunity to make any decision about whether Merchant was or was not willing to accept the credit of Issuing Bank.

Thus, although the fact that so much of the law of the credit card system is left to private agreement makes it difficult to assert any conclusions with complete confidence, it makes perfect sense to say that allocation of risk for the credit card system can be consistent with the general principle developed above: if one of the institutions providing the payment service becomes insolvent, the risk of that insolvency lies with other providers, not with users. At the very least, it is clear that there is nothing about the credit

card system that should stand as an obstacle to the articulation of a general legal rule to that effect.

G. Debit Cards

Years ago, the term “debit card” was rarely encountered. For years, banks have been issuing cards, commonly called “ATM cards,” that their customers could use to make cash withdrawals from ATM machines at the bank itself or at a network of banks. But, in the early days, the card was essentially just a way to withdraw cash from the user’s bank account.⁵² The user would then use cash to pay for things. More recently, debit cards have developed into a significant payment system, whereby a user can purchase goods or services from a merchant. The transaction is implemented by swiping the “debit card” through a terminal at the merchant’s location, with the result that the user’s account at her bank is debited and the merchant’s account at its bank is credited.⁵³

Though the term “debit card” is commonly used for this system, it is in fact quite difficult to decide whether we should describe it as a debit transfer system or as a credit transfer system. Suppose that the card is used by Cardholder to buy goods from Merchant. The transaction is implemented by Cardholder swiping the card through a terminal at Merchant. But, how would we describe what happens after the card is swiped? Was this a transaction in which Cardholder contacted Cardholder’s Bank and instructed Cardholder’s Bank to transfer funds to Merchant’s Bank for credit to Merchant’s account? Or was it a transaction in which Merchant contacted Merchant’s Bank and instructed it to draw funds from Cardholder’s Bank, and then Cardholder’s Bank charged Cardholder’s account? The reality is that either, or neither, is probably accurate. In a common implementation, the parties—Cardholder and Merchant—initiate a communication that initially goes to neither the Cardholder’s Bank nor to the Merchant’s Bank, but to a data processing entity that is acting on behalf of both Cardholder’s Bank and Merchant’s Bank.⁵⁴ That data processing entity contacts Cardholder’s Bank and verifies that the access device is authorized and that the amount in the account is sufficient to cover the amount of the purchase. If so, the transaction proceeds and (albeit with varying degrees of time lags) the result is a debit to the Cardholder’s ac-

52. See 1 BAKER, BRANDEL & PANNABECKER, *supra* note 7, ¶ 1.03[4].

53. See *id.* ¶ 7.02.

54. *Id.* ¶ 7.03[2][a].

count at Cardholder's Bank and a credit to Merchant's account at Merchant's Bank.

First, let us consider the effect of initiation of the payment transaction on the underlying obligation. For consistency with prior discussions, let us now shift to speak of the cardholder as Debtor and the merchant as Creditor. Suppose that although the transaction was authorized and properly executed by Debtor, something goes wrong so that the payment transaction does not result in a final credit to the account of Creditor with Creditor's Bank. Is it possible that Creditor retains the legal right to pursue Debtor for the underlying obligation?⁵⁵ At first blush, one might suppose that the answer is yes. After all, Debtor did receive value from Creditor and Creditor has not received credit from Creditor's Bank. An affirmative answer to that question would, however, present intractable problems. As noted above, in the credit card system it would make no sense to say that Creditor retains a claim against Debtor for a transaction initiated by a credit card, because the whole point of the credit card device is to permit people to buy things for which they cannot afford immediate payment. The debit card system may not really be any different. Suppose that Debtor and Debtor's Bank have entered into an overdraft lending agreement under which Debtor's Bank has agreed to make payments on Debtor's behalf, even though Debtor's account does not, at that moment, contain sufficient funds. Then we would have the same problem as with the credit card system. It would not make sense to say that Debtor has agreed to a demand obligation for the amount of the purchase. The fact that banks these days commonly extend consumer credit via credit cards rather than via debit cards coupled with an overdraft lending arrangement is just a fortuity of history and marketing. It would make little sense to base a significant legal distinction on that fortuity. It makes far more sense to say that the underlying obligation is discharged at the instant that Debtor and Creditor initiate the debit card transaction and the system transmits to Creditor the message that ordinarily signals that the payment transaction will go through.

Now, consider the allocation of insolvency risk in the event that, for whatever reason, the system indicates that the payment transaction will go through, but something goes wrong as a consequence of the insolvency of one of the financial institutions involved. In the routine case, when contact is made between Creditor (and/or Debtor) and the data processing system, the system contacts Debtor's Bank and the payment transaction is either

55. Because the federal Electronic Funds Transfer Act, 15 U.S.C. §§ 1693-93r (2000), is concerned with the rights and duties between the customer and its own bank, there is nothing in the statute that bears on the question of the impact of the payment transaction on the underlying obligation.

approved or disallowed. If the transaction is approved, then it makes sense to say that at that instant Debtor's Bank obtains the legal right to debit Debtor's account for the amount, and Debtor's Bank incurs a legal obligation—to someone and ultimately for the benefit of Creditor—for the same amount. In the routine case, it also makes sense to say that, at that instant, Creditor obtains a claim against Creditor's Bank, and Creditor's Bank obtains a claim against Debtor's Bank.⁵⁶ Now, suppose that Debtor's Bank becomes insolvent before settlement of that obligation. As discussed above, in the credit card system it would make little sense to say that the legal obligation of Debtor's Bank evaporates merely because Debtor's Bank is unable to perform that obligation.

So the only remaining question is whether the obligation that Creditor's Bank would otherwise owe to Creditor is excused if Creditor's Bank is unable to collect its claim against Debtor's Bank. That, too, is in essence the same issue as was considered previously for the credit card system. It would make no sense to say that Creditor's Bank could impose on Creditor the risk of the solvency of Debtor's Bank. Creditor's Bank made the decision to participate in the system and had the opportunity to do so only if the system had adequate controls against credit risk. It would make no sense to allow Creditor's Bank to shift to Creditor the risk of insolvency of Debtor's Bank, since Creditor had no dealings with Debtor's Bank and no opportunity to make any decision about whether Creditor was willing to accept the credit of Debtor's Bank.

Thus, as with the credit card system, it makes perfect sense to say that allocation of risk for the debit card system should be consistent with the general principle developed above that if one of the institutions providing the payment service becomes insolvent, the risk of that insolvency lies with other providers, not with users.

H. Consumer E-Payment via Credit Transfer

Now, let us consider various forms of electronic payment systems used by individuals, beginning with electronic payment credit transfer systems. Banks routinely offer services to their customers whereby the customer can initiate a payment by contacting the bank via a computer system and instructing the bank to make the payment to a designated recipient.⁵⁷

56. As in other such cases it is important to distinguish between the question of the moment when Creditor obtains a legally enforceable claim against Creditor's Bank or when Creditor's Bank obtains a legally enforceable claim against Debtor's Bank and the question of when the accounting entries are made that reflect those legal obligations.

57. See I BAKER, BRANDEL & PANNABECKER, *supra* note 7, ¶ 10.02[3].

The systems typically permit both recurring scheduled payments and payments that will be made only on a specific instruction made by the customer to the bank. Although such systems are commonly described as a form of electronic bill payment, the electronic phase need only be between the customer and its bank. There is nothing about the systems that dictates how the customer's bank will actually carry out the transaction by making payment to the designated recipient. Conceivably, the customer's bank could send currency to the recipient. That, of course, is unlikely, but that payment might be made by a paper check or by some form of electronic transfer.

Suppose that Debtor gives an instruction to Debtor's Bank directing Debtor's Bank to make a payment to Creditor, that is, to do something that will result in a credit to Creditor's account at Creditor's Bank. In practice, the most likely use for such systems is to pay a precedent debt, for example, a utility, mortgage, or insurance bill. The first question to address is when that underlying debt is discharged. It is hard to say that the debt is discharged at the moment that Debtor gives the instruction to Debtor's Bank, or the moment that Debtor's Bank charges Debtor's account for the payment. After all, those events may well occur without any contact with Creditor. So it is hard to say that the underlying debt of Debtor to Creditor is discharged before the time that Creditor's account at Creditor's Bank is credited for the amount of the payment.

Suppose that Debtor does give an instruction to Debtor's Bank and that Debtor's Bank does charge Debtor's account, but that the transaction is not completed by a credit to Creditor's account at Creditor's Bank. That might occur, as the result of the insolvency of some intermediary institution, even though Debtor's Bank has been charged for the amount of the payment. Who bears the risk of the solvency of such an intermediary?

If the transaction is initiated by some mechanism that will result in a debit to an account maintained by Debtor with Debtor's Bank for personal, family, or household purposes, then the transaction as between Debtor and Debtor's Bank is governed by the federal Electronic Funds Transfer Act.⁵⁸ Note that, aside from that fact, the transaction is exactly the same as a wire funds transfer governed by Article 4A. However, since a part of the transaction is governed by the federal Electronic Funds Transfer Act, Article 4A does not of its own force apply to any part of the transaction.⁵⁹ Suppose Debtor's Bank says to Debtor, "We shouldn't have to recredit your account because we didn't do anything wrong, and our account with the intermedi-

58. 15 U.S.C. §§ 1693-93(r).

59. U.C.C. § 4A-108 (2005).

ary we dealt with was charged for the amount of the payment. If you have a problem, go chase the intermediary that failed.” As was seen above, in the non-consumer setting of wire transfers governed by Article 4A, the law emphatically rejects any such argument by Debtor’s Bank. Rather, under the non-variable money back guaranty rule of section 4A-402, the obligation of a business debtor to its own bank would be excused in such a case, even though that bank did nothing wrong and had no way of preventing the loss. It would be odd to say that business users require and are entitled to that protection, but consumer users must take the loss.

So if the problem should arise under present law, where the issue is not governed by any statute, it would be entirely appropriate for the courts to apply the Article 4A rules by analogy. If a new comprehensive body of payments law is formulated, it is hard to see any reason why the Article 4A approach should not be applied to consumer payment transactions as well as to business payment transactions.

I. Consumer E-Payment via Debit Transfer

Now consider a different form of consumer electronic bill payment. Rather than agreeing to an electronic bill payment plan with the consumer’s own bank, the consumer provides information about its bank account to the person who is to receive payment, and that person initiates the payment transaction.⁶⁰ For example, it is quite common for utilities companies, telephone companies, cable companies, and so forth to market electronic bill payment plans to their customers. In such plans, the consumer (Debtor) typically gives the utility (Creditor) the information from the MICR line of Debtor’s checks, that is, the ABA routing number of Debtor’s Bank and the account number of Debtor’s account with Debtor’s Bank. Using that information, Creditor initiates a debit transfer by instructing Creditor’s Bank to initiate a payment transaction that will draw funds from Debtor’s account at Debtor’s Bank.

In essence, such systems are functionally equivalent to the use of a debit card in a point-of-sale purchase. With the consent of Debtor, Creditor initiates a contact to the banking system that will, if all goes right, result in a debit to Debtor’s account at its bank and a corresponding credit to Creditor’s account at its bank. There is, of course, a minor difference. In point-of-sale debit card transaction, the authorization by Debtor and the initiation of the payment transaction by Creditor (or by Creditor and Debtor jointly) occur simultaneously. By contrast, in debit transfer bill payment plans,

60. See 1 BAKER, BRANDEL & PANNABECKER, *supra* note 7, ¶ 4.02.

Debtor first gives Creditor authorization to initiate the transaction and then, at some later time, Creditor does so. It would be unfortunate, however, if different rules applied as a result of this relatively minor difference. Thus, the only question should be whether there is any obstacle to implementation of the same system of rules for debit transfer bill payment plans as for point-of-sale debit card transactions.

As has been discussed, for point-of-sale debit card transactions, it makes sense to say that the underlying obligation of Debtor to Creditor is discharged at the moment that Debtor's Bank obtains a right to charge Debtor's account. There seems to be no reason not to apply the same approach to debit transfer bill payment plans. The only difference is that the point of discharge would typically be later in debit transfer bill payment plans than in point-of-sale debit card transactions. That would mean that Creditor would not necessarily know exactly when or whether the underlying obligation had been discharged, but that does not seem to pose any significant problems. In the routine case, nothing will go wrong with the payment transaction, so the question will never arise. If something goes wrong so that Creditor does not receive a final credit from its own bank, and Creditor seeks to collect from Debtor, Debtor can easily determine whether its account with its own bank has been debited. If so, that should operate as a full discharge of the underlying obligation.

Now consider the allocation of insolvency risk of the institutions involved in the payment transaction. Suppose that Debtor's account with its own bank is debited, but, for some reason, Creditor's Bank does not receive a final settlement. Perhaps some intermediary institution fails so that, while Debtor's Bank's account with that intermediary has been charged, Creditor's Bank's account has not been credited, or Creditor's Bank receives credit from an intermediary which fails. In such a case, should Creditor's Bank be allowed to revoke any settlement that it has given to Creditor? As was discussed above in connection with point-of-sale debit card transactions, it would be very odd to say that Creditor's Bank can impose upon Creditor the risk of the solvency of intermediary institutions. After all, Creditor's Bank, not Creditor, made the decision to participate in the system that involved use of that intermediary.

Thus, there seems to be no reason not to apply to debit transfer bill payment plans the general principle developed above that if one of the institutions providing the payment service becomes insolvent, the risk of that insolvency lies with other providers, not with users.

J. Non-Bank Payment Providers

Now let us consider payment arrangements in which an entity other than a bank plays a significant role. In general, we can think of these as arrangements in which Debtor enters into a relationship with Non-Bank Provider (NBP) to make payments to Creditor that will, if all goes well, result in a credit to Creditor's account, either with NBP or with Creditor's Bank. The source of payment might be either an account that Debtor maintains with NBP, or an account that Debtor maintains with Debtor's Bank. In the later case, the arrangement would include authorization by Debtor to NBP to access Debtor's account with Debtor's Bank.

Consider several variants that are currently in place. First, there is the PayPal system routinely used to make payment for E-Bay online auction purchases.⁶¹ As I understand it, the PayPal system requires that the selling merchant, Creditor to use our terminology, maintain an account with PayPal. Payment is made by causing a credit to be made to Creditor's PayPal account, that is, payment occurs by a credit to Creditor's account with NBP. Of course, Creditor might thereafter direct that funds be transferred from Creditor's account with NBP to an account that Creditor maintains with another entity, such as Creditor's Bank. On the other side, the person making the payment (Debtor) might fund it in various ways. Debtor might also maintain an account with PayPal itself, in which case payment would be made simply by debiting that account. Or Debtor might fund the payment by authorizing PayPal to initiate a charge either to a credit card account that Debtor maintains with a bank or to a deposit account that Debtor maintains with a bank. As was discussed earlier, there is no significant difference between these later two variants. In either case, Debtor is authorizing NBP to receive payment from an account that Debtor maintains with Debtor's Bank. It makes no difference for present purposes whether the Debtor's balance in that account is typically positive (the deposit account version) or negative (the credit card account version).

Let us look at insolvency risk issues in such a system. Suppose that both Debtor and Creditor maintain accounts with NBP, so that the payment transaction consists simply of a debit to Debtor's account with NBP and a corresponding credit to Creditor's account with NBP. How should we describe such a system? Actually, it is pretty simple. The system is essentially the same as the nineteenth-century system of payment by circulating notes issued by banks or non-bank issuers. As was discussed above, the law on insolvency risk in that system was quite complicated, but in modern im-

61. See generally PayPal Home Page, <http://www.paypal.com> (last visited Mar. 9, 2007).

plementations can be made quite simple. The simplest and fairest rule would be that as soon as the payment transaction occurs, that is, as soon as Debtor's account is debited and Creditor's account is credited,⁶² the underlying obligation is discharged and the risk of the solvency of the NBP passes from Debtor to Creditor.

Now suppose that Debtor does not maintain an account with NBP. Instead, Debtor authorizes NBP to receive payment from Debtor's account with Debtor's Bank, and to make payment by crediting Creditor's account with NBP. We can think of such a system as a combination of (i) a payment made from Debtor's account with Debtor's Bank to what we might describe as a notional account of Debtor with NBP, and (ii) an immediate payment from that notional account to Creditor's actual account with NBP. The second phase is essentially the same as the simple case just considered, in which both Debtor and Creditor maintain accounts with NBP. As we have just seen, in that phase, the risk of NBP's insolvency passes immediately from Debtor to Creditor. Thus, if we look at the payment transaction from Debtor's perspective, the entire payment transaction to Creditor is completed at the instant that the first phase is completed—that is, at the moment of the completion of the transaction from Debtor's account with Debtor's Bank to Debtor's notional account with NBP. As was seen above, whether that is a credit card transaction or a debit card transaction, payment is completed at the instant that Debtor's account with Debtor's Bank is charged.

Now let us consider a different form of Non-Bank Payment provider transaction. Debtor might enter into an arrangement with NBP whereby Debtor deals only with NBP and NBP makes arrangements that will result in debit to Debtor's account with Debtor's Bank and a corresponding credit to Creditor's account with Creditor's Bank.⁶³ On Debtor's side, the system is the same as that just considered. The payment is made either by debit to an account that Debtor maintains with NBP or by a transfer from an account that Debtor maintains with Debtor's Bank. On the creditor side, however, there is a significant difference. The marketing niche that such systems seek to exploit is to enable Debtor to make payment to essentially anyone. Accordingly, unlike the PayPal system considered above, the pay-

62. As in other systems, one need not get bogged down in the details of the internal accounting to decide whether these two events always occur simultaneously. The relevant question is not when or how the accounting entries are made, but when NBP's legal obligation to Debtor is reduced and NBP's legal obligation to Creditor is increased. Since we have only one obligor, those two events are simultaneous.

63. The system currently offered by CheckFree would be an example. *See* CheckFree Home Page, <http://www.checkfree.com> (last visited Mar. 9, 2007).

ment transaction would not conclude with a credit to an account that Creditor maintains with NBP. Instead, the payment would be completed by some form of transaction resulting in a credit to an account that Creditor maintains with Creditor's Bank. For the system to be effective, it would have to include a variety of different systems by which payment could be made to a variety of different creditors.

From one perspective, such systems seem relatively novel. From another perspective, however, there is nothing all that new about them. We considered above the electronic credit transfer bill payment systems that banks have been marketing for years. We commonly think of those as arrangements between Debtor and Debtor's Bank, and think of Debtor's Bank as the entity operating the system. If, however, we take off our lawyer glasses and put on information technology glasses, it is pretty obvious that all of the thousands of banks offering such a system cannot possibly be operating the systems themselves. Instead, the banks contract with data processing firms to carry out the system.⁶⁴ So, from an information technology perspective, there is really no difference between such a Non-Bank Provider system and a system for electronic credit transfer bill payment provided by a bank. In the bank system, the user logs onto the bank's webpage and enters the information. The data processing firm then actually handles the implementation of the transaction. In the Non-Bank Provider version, the user logs onto the NBP's website and enters the information. But, the same entity actually carries out the data processing that results in the debit to Debtor's account with Debtor's Bank and the credit to Creditor's account with Creditor's Bank.

When electronic credit transfer bill payment systems were considered above, we noted that it was possible that Debtor would give an instruction to Debtor's Bank, and that Debtor's Bank would debit Debtor's account, but that the payment transaction would not be completed by a credit to Creditor's account with Creditor's Bank. In that discussion, it was suggested that it made sense to draw an analogy to the money back guaranty provision of U.C.C. section 4A-402, so that Debtor's Bank would not be entitled to charge Debtor's account if the payment was not completed by a credit to Creditor's account at Creditor's Bank. It would certainly make sense to draw on the same analogy for NBP systems—at least to the extent of saying that the NBP itself has an obligation to refund any charge made to Debtor's account if the payment transaction is not completed by a credit to Creditor's account with Creditor's Bank. That alone, however, could

64. CheckFree is apparently a leader in this business. *See id.*

mean that Debtor's account with its own bank had been charged, and Debtor's recourse would be against NBP rather than Debtor's own bank. Conceivably, one could extend the money back guaranty notion to say that Debtor's own bank has an obligation to recredit Debtor's account if a payment transaction initiated by a contact from Debtor to NBP does not result in a credit to Creditor's account with Creditor's Bank. That extension, however, might be problematic, since it is possible to imagine such systems operating essentially without any consent by Debtor's Bank. Debtor would have provided NBP with means of access to Debtor's Bank, so Debtor's Bank might argue with some persuasive force that all it did was follow the instructions given by Debtor or by NBP as Debtor's agent. There might then be little that could appropriately be done to insulate Debtor from insolvency risk in such a system.

CONCLUSION

There appear to be no insurmountable obstacles to unification of payment systems law on the issues of insolvency risk considered in this article. As has been noted, private law cannot eliminate the risk of provider insolvency. A person who maintains an account with a given institution necessarily accepts the risk of that institution's solvency. So before any payment transaction, Debtor takes the risk of the solvency of Debtor's Bank. After the completion of the payment transaction, Creditor takes the risk of the solvency of Creditor's Bank. The question is what to do when insolvency of some financial institution prevents completion of the payment transaction. On that question, it seems entirely feasible to adopt a general principle that the risk of intermediary provider insolvency is borne by the providers of the payment system, not by the users of the payment system.

A more complete analysis of the feasibility of unification would, of course, require a similar examination of all other significant areas of payment system law. Moreover, as was noted above, the feasibility of unification is likely to depend in large part on political factors. But assuming that something happens that provides the political will for significant change, there is the question of what a unified body of law might look like. Perhaps the main lesson of the recent past is that it is highly likely that any legislative enactment will be written in a fashion that inadvertently reflects current technology and practice. That is likely to operate as an obstacle to the flexibility needed for changes in payment system technology.

Perhaps the best example of the problem of inadvertent technological references is found in the federal Electronic Funds Transfer Act.⁶⁵ That Act applies to any “electronic fund transfer,” defined as a “transfer of funds . . . initiated through an electronic terminal, telephonic instrument, or computer or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit an account.”⁶⁶ Today, one would assume that an electronic home banking arrangement would be an obvious example of an “electronic fund transfer” governed by the Act. But it is not actually so obvious—it depends on how one parses that definition, and on what practices about the usage of commas one assumes.

The definition of “electronic fund transfer” might be read as covering four things: (1) electronic terminal,⁶⁷ (2) telephonic instrument, (3) computer, or (4) magnetic tape. But the placement of the comma⁶⁸ suggests that it really applies only to three things: (1) electronic terminal, (2) telephonic instrument, or (3) computer or magnetic tape. In other words, that last clause should be read as meaning “computer tape or magnetic tape.” If one takes the latter reading, then the statute does not apply to computer home banking arrangements. But, to a reader in 2007, that seems like a very odd interpretation for at least two reasons: First, it seems obvious that Congress must have intended the Act to apply to computer home banking arrangements. Second, what could the phrase “computer tape” possibly mean? But, remember, the Act was adopted in 1978. At that time, computers were huge machines used only by businesses. Steve Jobs was still playing around in his garage. Personal computers were unheard of. What reason is there to suppose that Congress was thinking about something that had not yet developed? But, what about that odd phrase “computer tape”? If we think back to 1978, we might well find a meaning for that phrase. As I recall, in the early 1970s instructions to computers were commonly loaded in the form of stacks of IBM cards. Then, during the 1970s, the stacks of separate cards were replaced by long rolls of punched paper tape. Though I believe that the tape was usually just called something like “punched paper tape,” it is certainly possible that the phrase “computer tape” might have been used to describe it. In that case, one can plausibly

65. 15 U.S.C. §§ 1693–93r.

66. *Id.* § 1693a(6).

67. It is pretty clear that “electronic terminal” means ATM machine. *See id.* § 1693a(7). One would not want to interpret “electronic terminal” as including a consumer’s home computer, because if one did the bank would have the obligation to provide a paper receipt for each transaction that the consumer initiates from her computer. *See id.* § 1693d(a). Maybe the banks would hand out printers for our home computers when we opened accounts. After all, they used to give out toasters.

68. For an exhaustive discussion of this “Oxford comma” issue, see LYNNE TRUSS, EATS, SHOOTS & LEAVES: THE ZERO TOLERANCE APPROACH TO PUNCTUATION 83–87 (2003).

read the statutory language as applying to “computer or magnetic tape,” but not to “computer” alone. So, at the time the statute was written, it may have made perfect sense to write it in a way that did not happen to include home computer banking—a phenomenon that was years in the future.

Fortunately, the Act also gives the Federal Reserve Board extensive rule-making power, a power not obviously limited by the exact language of the statutory definitions or other substantive provisions.⁶⁹ The Board has exercised that authority in a fashion that subtly eliminates the problem by more careful punctuation, defining “electronic fund transfer” as a “transfer of funds that is initiated through an electronic terminal, telephone, computer, or magnetic tape”⁷⁰

The lesson to draw from the federal Electronic Funds Transfer Act is that one must be very careful in drafting statutory language to avoid inadvertently limiting the scope by reference to the technology and practices then employed. The occasion for adopting or amending statutes—particularly statutes on as dry a topic as payment system law—comes along infrequently. The other lesson is that one has to provide for flexibility by granting fairly extensive rule-making power to an administrative agency. Why not take those lessons to their logical conclusion?

Suppose Congress were to adopt a statute that simply provided that the Board of Governors of the Federal Reserve System shall have power “to adopt regulations governing the rights and duties of users and providers of any payment system.” I realize that this is probably politically infeasible, if only because both providers and users are likely to want to persuade Congress to say that any such rules should at least provide that “[fill in your favorite resolution of an issue of concern to you].” But such a statute would permit us to work toward a more rational and modern law of payment systems.

69. 15 U.S.C. § 1693b(a) (“The Board shall prescribe regulations to carry out *the purposes of this title*”) (emphasis added).

70. 12 C.F.R. § 205.3(b) (2007). There is a similar problem in deciding whether the definition of “electronic fund transfer” in the Act would apply to the use of a debit card in a non-face-to-face transaction. The Board has resolved that problem by the *ipse dixit* technique of stating that “electronic fund transfer” includes “transfers resulting from debit card transactions, whether or not initiated through an electronic terminal.” 12 C.F.R. § 205.3(b)(v). Curiously, there seems to be no definition of “debit card.”