

Regulating Internet Payment Intermediaries

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I. Introduction

The Internet has produced significant changes in many aspects of commercial interaction. The rise of Internet retailers is one of the most obvious changes, but oddly enough the overwhelming majority of commercial transactions facilitated by the Internet use a conventional payment system. Thus, even in 2002, shoppers made at least eighty percent of Internet purchases with credit cards.¹ To many observers, this figure has come as a surprise. The early days of the Internet heralded a variety of proposals for entirely new payment systems—generically described as electronic money—that would use wholly electronic tokens that consumers could issue, transfer, and redeem. But years later, no electronic-money system has gained a significant role in commerce.²

The continuing maturation of the Internet, however, has brought significant changes to the methods by which individuals make payments. Person-to-person (P2P) systems like PayPal now make hundreds of millions of payments a year between individuals.³ The most common purpose is to facilitate the purchase of items at Internet auctions, but increasingly P2P

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1. The federal government does not collect official statistics about the use of various payment systems, so I necessarily rely on published estimates. Because those estimates often are based on survey data and similar sources, their accuracy is open to question. On this point, for example, assessments differ substantially. See Linda Punch, *Authentication's Tentative Gains*, CREDIT CARD MGMT., May 2002, at 26, 26 (reporting that 90% of Internet purchases are made with credit cards without specifying the relevant time frame); ePaynews.com, Payment Instruments as a Percentage of Total eCommerce (reporting that, in 2002, 81.3% of Internet purchases were made with credit cards), at <http://www.epaynews.com/statistics/transactions.html#39> (last visited Oct. 18, 2003). Those high rates of usage persist despite the widespread concern about the security of payments made by credit card. See, e.g., ePaynews.com, US Credit Card Fraud Statistics, 2000–2007 (reporting rates of online credit card fraud about thirty times as high as overall credit card fraud rates), at <http://www.epaynews.com/statistics/fraud.html#21> (last visited Oct. 18, 2003).

2. The most famous of the electronic-money providers, DigiCash, eventually filed for bankruptcy. For a discussion of the reasons that electronic-money products have failed to make a market impact, see RONALD J. MANN & JANE K. WINN, ELECTRONIC COMMERCE 491–97 (2002); BRIAN MANTEL, WHY DON'T CONSUMERS USE ELECTRONIC BANKING PRODUCTS? TOWARDS A THEORY OF OBSTACLES, INCENTIVES, AND OPPORTUNITIES (Fed. Res. Bank of Chi., Emerging Payments Occasional Paper Series No. EPS-2000-1, Sept. 2000), at http://www.chicagofed.org/publications/publicpolicystudies/emerging_payments.

3. See ePaynews.com, P2P Payment Provider Activity, 2001–2005 (reporting a total of 105 million P2P payments in 2002, and predicting more than 1.4 billion P2P payments in 2005), at <http://www.epaynews.com/statistics/transactions.html#45> (last visited Oct. 18, 2003).

transfers are used to transfer funds overseas. Less far along, but gaining transactions rapidly, are a variety of systems for electronic bill presentment and payment (EBPP).⁴ Interestingly, both of these developments follow a less ambitious path than the still-hypothetical electronic-money systems: they involve the use of intermediaries to “piggyback” on existing systems to provide payment. Thus, in essence, they use the technology of the Web site to facilitate the use of conventional payment networks.⁵

However disparate these developments might seem at first glance, they present a common challenge to the regulatory system.⁶ Unlike banks, which control the execution of payment transactions in conventional payment systems, the intermediaries that populate these new sectors generally are not inevitably subject to regulatory supervision. At most, they are subject to regulation as money transmitters (akin to the regulation of Western Union).⁷

That circumstance presents a serious gap in the regulatory scheme. The pervasive regulatory supervision of banks helps to ensure that they honor their obligations under a variety of consumer-protection and data-privacy regulations that govern their activities.⁸ A shift of a significant share of volume to the new and unregulated entities raises a corresponding risk of loss from the irresponsibility of those entities.⁹ Thus, although the risk of fraud and privacy violations is doubtless higher in these new forms of transactions than it is in conventional transactions, the regulatory framework governing them is much weaker.¹⁰

4. The market for online bill payment has the potential to be much larger than the P2P market. A recent Federal Reserve study, for example, indicates that consumers in 2000 wrote about 15 billion checks to make bill payments. Geoffrey R. Gerdes & Jack K. Walton II, *The Use of Checks and Other Noncash Payment Instruments in the United States*, FED. RES. BULL., Aug. 2002, at 360, 361, 367 n.15 (reporting that, in 2000, 42.5 billion payments were made by check, and that 36% of checks written by consumers that could be classified by purpose were for bill payment). About a quarter of Americans are currently using an EBPP product. See E-mail from CardFlash, CardWeb.com, Inc., to Ronald J. Mann, Professor of Law, The University of Michigan Law School (Oct. 11, 2002) (on file with author) (reporting that 22% of Americans would be using e-billing systems by the end of 2002).

5. See BRIAN MANTEL & TIM MCHUGH, CHANGING E-PAYMENT PAYMENT NETWORKS IN THE U.S.: THE STRATEGIC, COMPETITIVE & INNOVATIVE IMPLICATIONS 2–10 (2002), at <http://www.chicagofed.org/paymentsystems/publications.cfm>.

6. See Andrew L. Shapiro, *Digital Middlemen and the Architecture of Electronic Commerce*, 24 OHIO N.U. L. REV. 795, 801–05 (1998) (suggesting the need for new regulatory models to deal with Internet-based reintermediation).

7. See *infra* notes 124–30 and accompanying text.

8. For a discussion of those protections, see *infra* subpart III(A).

9. For one of several articles about problems targeting P2P systems, see Linda Rosencrance, *E-mail Scams Continue to Target PayPal Users* (Mar. 10, 2003), at <http://www.computerworld.com/securitytopics/security/cybercrime/story/0,10801,79222,00.html>. For a discussion of security problems in EBPP systems, see Alexandria Andreeff et al., *Electronic Bill Presentment and Payment—Is It Just a Click Away?*, ECON. PERSP., 4th Quarter 2001, at 2, 10, available at <http://chicagofed.org/publications/economicperspectives/2001/index.cfm>.

10. See ePaynews.com, US Credit Card Fraud Statistics, *supra* note 1.

Although the advent of the new transactions has been widely noted,¹¹ the literature contains no sustained legal or policy analysis of the problems that they pose. This Article responds to that challenge. The analysis proceeds in three steps. Part II provides a summary description of the mechanics of the systems, focusing on how they interact with existing payment systems and conventional actors in those systems. Part III explains the problems with the existing laws (principally the Electronic Funds Transfer Act¹² (the EFTA) and regulations that the Federal Reserve has promulgated to implement that statute). Generally, the problem is that the outdated provisions of the EFTA and the applicable regulations leave consumers exposed to losses from fraud and error in the new transactions, even though federal law would protect them from this loss if the transactions had been completed directly with conventional payment systems. Finally, Part IV examines broader questions of how to ensure that the new Internet intermediaries are adequately motivated to comply with the obligations the EFTA and privacy laws impose. Any regulatory intervention must accommodate both the benefits of increased competition from those new entities and the risks that their lack of responsibility will harm the consumers whose accounts are involved in the transactions.

II. The New Transactions

A. P2P Systems

The success of eBay's auction business¹³ had the rare effect of creating a vast market for an entirely new payment product, one that would allow non-merchants (who cannot accept conventional credit card payments)¹⁴ to receive payments quickly in remote transactions.¹⁵ Without such a system, purchasers in the early days of eBay had to use cashier's checks or money

11. See Andreeff et al., *supra* note 9, at 2; Kenneth N. Kuttner & James J. McAndrews, *Personal On-Line Payments*, ECON. POL'Y REV. (Fed. Res. Bank of N.Y.), Vol. 7, No. 3, at 35 (2001), available at <http://www.newyorkfed.org/research/epr/2001.htm>; Loretta J. Mester, *The Changing Nature of the Payments System: Should New Players Mean New Rules?*, BUS. REV. (Fed. Res. Bank of Phila.), Mar./Apr. 2000, at 3, available at <http://www.phil.frb.org/econ/br/br00.html>; Ann H. Spiotto, *Electronic Bill Payment and Presentment: A Primer*, 57 BUS. LAW. 447, 449–52 (2001); Ann Spiotto & Brian Mantel, *Rethinking Business: Electronic Bill Payment and Presentment and Aggregation*, ABA BANK COMPLIANCE, May/June 2001, at 18.

12. The EFTA is codified as Title IX of the Consumer Credit Protection Act, 15 U.S.C. §§ 1693–1693r (2000).

13. E.g., Brad Hill, *What Makes eBay Invincible*, E-COM. TIMES, Mar. 4, 2003 (stating that eBay booked "\$15 billion in sales in 2002, far eclipsing Amazon's . . . \$4 billion"), at <http://www.ecommercetimes.com/perl/story/20900.html>.

14. Currently, no credit card network in the United States has more than five million merchants that accept it. See CardWeb.com, Inc., U.S. End-of-Year Merchant Acceptance by Brand—Current & Historical, at <http://www.cardweb.com/carldata/charts/acceptance.html> (last visited Nov. 17, 2003) (copy on file with author). Five million may be a lot, but it is only a few percent of the total population of the nation.

15. See Kuttner & McAndrews, *supra* note 11, at 35.

orders. Typically, sellers waited to ship products until they received the paper-based payment device in the mail. From a flood of startups offering competing products,¹⁶ PayPal (now owned by eBay) has emerged as the dominant player in the industry,¹⁷ processing hundreds of millions of payments each year.¹⁸ Indeed, industry sources expect that by 2005, auction payments will account for ninety-five percent of the possibly four billion person-to-person payment transactions expected to be made that year.¹⁹ A separate (and much smaller) submarket, exemplified by CitiBank's recently abandoned c2it service, uses similar systems for cross-border payments.²⁰

To understand the policy ramifications of P2P payments, it is necessary to understand the relation between the P2P provider and the conventional accounts from which and to which P2P payments are made. That relation can be illustrated by a summary of the three steps that must be completed for a successful P2P transaction.

1. *Providing Funds for Payment.*—The purchaser that wishes to use a P2P provider to make a payment has two general ways to provide funds for payment. First, it could fund an account²¹ with the provider, normally by

16. For a discussion of competitors in the heyday (around 2000), see ZDNet Anchor Desk, *The Check's in the Email; P2P Payments Come of Age*, ZDNET, Oct. 2, 2000 (discussing PayPal and eight competitors), at http://reviews-zdnet.com.com/4520-6033_16-4205089.html.

17. For a discussion of the failed efforts by Amazon and Yahoo, see Hill, *supra* note 13.

18. *Cf.* PayPal, Welcome (stating that PayPal has “[o]ver 31 million accounts worldwide”), at <http://www.paypal.com> (last visited Nov. 18, 2003). PayPal's transaction volume increased by 80% during the last year, rising to \$2.63 billion in the first quarter of 2003. E-mail from CardFlash, CardWeb.com, Inc., to Ronald J. Mann, Professor of Law, The University of Texas School of Law (Apr. 25, 2003) (on file with author).

19. Lavonne Kuykendall, *Year Later, Little Payoff in Web P-to-P Payment*, AM. BANKER, Apr. 2, 2001, at 12. For a more pessimistic assessment (that there will be only 1.4 billion transactions in 2005), see *P2P Payment Provider Activity*, *supra* note 3.

20. *See, e.g.*, Press Release, Citigroup, Citibank's c2it Goes Global with International Funds Transfer Capability (May 22, 2001) (on file with author) (describing the availability of transfers to thirty countries); Rina Chandran, *Sending the Greenbacks Home*, HINDU BUS. LINE: INTERNET EDITION, Aug. 8, 2002 (discussing the market advantages of the service, particularly for immigrants sending money from the United States to their home countries), at <http://www.blonnet.com/catalyst/2002/08/08>. For a discussion of PayPal's relative weakness at international transfers, see Tiernan Ray, *eBay's Secret Weapon*, E-COM. TIMES, Mar. 19, 2003, at <http://www.ecommerce-times.com/perl/story/21037.html>.

21. To open an account with a P2P payment provider, a customer typically fills out a form at the provider's web site. Because funding into the system often will be accomplished from some other account, that process is followed by some form of offline verification of the identity of the customer. This precaution is required because P2P systems have been the subject of frequent fraudulent attacks—both by organized crime groups trying to launder funds, see, e.g., Beth Cox, *eBay to PayPal Gamblers: No Dice*, SILICONVALLEY.INTERNET.COM, July 12, 2002, at <http://siliconvalley.internet.com/news/article.php/1403631>; Ina Steiner, *eBay/PayPal Fraud with a Twist: International Money Laundering*, AUCTIONBYTES.COM, Jan. 29, 2003, at <http://www.auctionbytes.com/pages/abn/y03/m01/i29/s01>, and by credit card thieves trying to extract immediate cash, see Evan I. Schwartz, *Digital Cash Payoff*, TECH. REV., Dec. 2001, at <http://www.technologyreview.com/articles/schwartz1201.asp>.

drawing on a deposit account or a credit card account. Because that process ensures that funds are available for an immediate transfer, it is widely used by those who make frequent purchases. P2P account balances are also commonly used by frequent eBay sellers, who receive funds into their P2P accounts from individuals who purchase the auctioned item. Alternatively, the purchaser could wait until the moment that it wishes to make a purchase. Again, it could choose at the time of payment to provide the funds in question by drawing on either a deposit account or a credit card account. As discussed below, the choice between a credit card and a deposit account as a funding source has significant legal consequences to the user.²²

In either case, the fee structure is likely to discourage the use of credit cards, because the P2P provider incurs higher fees when it pays the interchange owed to the bank that has issued the credit card from which funds are drawn than when it pays the fees necessary to draw funds from a deposit account through a debit entry in the Automated Clearinghouse (ACH) system.²³ Similarly, because the P2P provider can profit by investing funds that remain in transaction accounts, some providers (including PayPal) encourage users to leave funds in those accounts by paying interest on them.²⁴

2. *Making Payments.*—The attraction of the P2P process is that it is quite simple to make payments. Normally, the only information that the purchaser needs to make a payment is the amount of money and the email address of the intended recipient. After entering that information into a form at the P2P provider's Web site, the purchaser clicks on a "send money" button to request execution of the transaction.²⁵ If the funds are sent from a balance in an account with the P2P provider or if they are drawn from a credit card, they should arrive in a few hours. If funds are drawn directly from a deposit account, arrival will be delayed by a few days (until settlement of the ACH transaction to obtain the funds from the user's bank).

22. See *infra* Part III.

23. At PayPal, for example, personal accounts cannot accept credit card payments. A user can accept those payments only by upgrading to a Premier or Business account. PayPal, Fees Policy, ¶ b, at http://www.paypal.com/cgi-bin/webscr?cmd=p/gen/ua/policy_fees-outside (last modified Aug. 15, 2003) [hereinafter PayPal Fees Policy]. Those accounts are charged a schedule of fees starting at 2.2% for payments that they receive. PayPal, Fees for Receiving Payments (Premier and Business Accounts), at <http://www.paypal.com/cgi-bin/webscr?cmd=p/gen/fees-receiving-outside> (last visited Oct. 28, 2003) [hereinafter PayPal Fees for Receiving Payments].

24. See Ron Leuty, *PayPal Hunts for Steady Revenues*, S.F. BUS. TIMES, July 16, 2001 (discussing the transition from a model in which PayPal made money "off the float" to a transaction-fee model, under which transaction fees are now 90% of PayPal's revenues), available at <http://sanfrancisco.bizjournals.com/sanfrancisco/stories/2001/07/16/focus5.html>.

25. See, e.g., PayPal, Send Money, at <http://www.paypal.com/cgi-bin/webscr?cmd=p/ema/index-outside> ("See Demo" link) (last visited Oct. 28, 2003).

3. *Collecting Payments.*—The final step is for the recipient (the seller if the payment is for an auction) to collect the payment. In the typical process, the recipient receives an email notifying it that the payment has arrived.²⁶ If the recipient has an account with the P2P provider and is willing to leave the funds in that account, then it is finished. If the recipient does not have an account or wishes to withdraw the funds, it will need to go to the provider's Web site and provide the necessary details.²⁷

Ordinarily, the recipient will pay some fee to the provider for making the payment available. Those fees vary considerably, but a typical charge at PayPal would be 25–50 cents plus 2–4% of the transaction amount.²⁸ In addition, if the payment is made with a credit card, the recipient may be required to bear the cost of any chargeback that the payor seeks under its agreements with the provider and card issuer.²⁹

B. EBPP Systems

EBPP systems are not as developed as P2P systems.³⁰ Accordingly, it is harder to provide a clear picture of their operations. Generally, three

26. See PayPal, What Happens After I Send Money?, at http://www.paypal.com/cgi-bin/webscr?cmd=_help-ext&eloc=364&loc=362&unique_id=1790&source_page=_home&flow= (last visited Nov. 18, 2003) [hereinafter PayPal Procedures for Receiving Payments].

27. See PayPal, User Agreement for PayPal Service § 5.3 (describing procedures for withdrawing funds from PayPal), at <http://www.paypal.com/cgi-bin/webscr?cmd=p/gen/ua/ua-outside> (last visited Oct. 29, 2003) [hereinafter PayPal User Agreement].

28. See PayPal Fees for Receiving Payments, *supra* note 23.

29. PayPal User Agreement, *supra* note 27, § 5.1. In the case of a reversed credit card payment, the cost is likely to include not only the amount of the transaction, but also a chargeback fee imposed by the credit card network (Visa or MasterCard, for example) of about \$10. See PayPal Fees Policy, *supra* note 23, ¶ e. PayPal will waive this chargeback fee under the circumstances laid out in its Seller Protection Policy, which requires sellers to act prudently when accepting payments and shipping goods. See PayPal, Seller Protection Policy, at <http://www.paypal.com/cgi-bin/webscr?cmd=p/gen/protections-outside> (last visited Oct. 30, 2003).

30. EBPP products gained a significant jump in usage during the anthrax scares in late 2001—which at least temporarily raised consumer sensitivity to receiving and sending mail. See Keith Regan, *Report: Online Bill Payment Growing—Not Because of Mail Scares*, E-COM. TIMES, Nov. 12, 2001 (discussing studies of spikes in EBPP usage about the time of the anthrax scares and suggesting that there is a long-term growth trend), at <http://www.ecommercetimes.com/perl/story/14718.html>. The continuing growth during the years since then suggests that these products will continue to grow in importance during future decades. See sources cited *supra* note 4. Because growth appears to correlate with the availability of broadband Internet access, see ePaynews.com, *How Broadband Changes Consumers' Online Financial Activity* (indicating that broadband access is associated with a 46% increase in reviewing bills online and an 11% increase in paying bills online), at <http://www.epaynews.com/statistics/bankstats.html#23> (last visited Oct. 30, 2003), the continuing growth of broadband access suggests that the market share of these products will continue to grow rapidly. See CheckFree, *Understanding EBP Models: Biller-Direct and Bill-Distribution 4-5* (2001) (copy on file with author) (arguing that EBPP will grow in usage as more Americans are online). One recent survey estimates that about 28% of U.S. online households currently have broadband access and that the rate is growing at about 9% per month. See Press Release, Gartner, Inc., *Gartner Dataquest Survey Shows Steady Increase of Broadband Access in U.S. Households* (Nov. 13, 2002), at http://www3.gartner.com/5_about/press_releases/2002_11/pr20021113a.jsp.

different models compete within that industry. The first model consists of products presented by the billing businesses, which send bills to consumers by email and provide a Web site at which payment can be made.³¹ The second consists of products of depository institutions, which permit their customers to pay bills at a Web site operated by the institution.³² The third consists of products offered by third-party intermediaries. The intermediaries operate Web sites that collect bills from various businesses, present them to consumers on behalf of the billers, and then forward payment from the consumers to the billers.³³

As with P2P systems, the fact that the different models compete to perform quite similar services for consumers should not obscure the significantly differing legal and policy implications of the different models. Accordingly, it is important to explain briefly how each of the three models works.

1. *Biller Web Sites.*—As the name suggests, the biller Web site model is quite simple. The consumer goes directly to the biller's Web site to view the bill. In many cases, the site will "push" the bill to the consumer by sending an email that includes a link to the full details of the bill.³⁴ If the consumer is satisfied with the bill, it authorizes the biller to collect payment. The biller, in turn, proceeds to collect the payment (often through a third-party provider such as CheckFree).³⁵ Alternatively, the biller itself could initiate an ACH transaction debiting the consumer's account.³⁶

31. See ePaynews.com, EBPP Share Between Banks, Billers & Third-Party Providers (reporting that the biller-direct model accounts for 35% of the 2003 market share), at <http://www.epaynews.com/statistics/bankstats.html#10> (last visited Oct. 30, 2003); Steve Bills, *Card Issuers Poised to Profit in Electronic Bills*, AM. BANKER, June 11, 2002, at 8A, 9A (discussing the success of credit card issuers using the biller-direct model); Chris Costanzo, *Tech Scene: E-Bill Presenters Meet Harsh Reality, See Hard Road Ahead*, AM. BANKER, May 22, 2002, at 1, 14 (discussing the biller-direct model more generally). American Express alone has more than eight million customers who use that method of payment. ePaynews.com, Online Account Management Figures for Banking & EBPP, at <http://www.epaynews.com/statistics/bankstats.html#33> (last visited Oct. 30, 2003).

32. Estimates for the market shares of the different models differ sharply, but it is clear that the bank-site model has a significant share of the market. See ePaynews.com, EBPP Share, *supra* note 31 (reporting a 20% market share for bank sites in 2003); Clare Saliba, *Study: Customers Like Banks for Online Bill Pay*, E-COM. TIMES, Nov. 12, 2001 (reporting that 55% of EBPP users use sites maintained by their bank), at <http://www.ecommercetimes.com/perl/story/14722.html>.

33. As with so many of the aggregate market statistics relevant to this subject, estimates differ sharply, but all show a significant share for third-party sites. See ePaynews.com, EBPP Share, *supra* note 31 (reporting a 45% market share for third-party sites in 2003); Saliba, *supra* note 32 (reporting that 10% of EBPP users use independent providers).

34. For example, American Express offers a service that sends an e-mail each month to its cardholders offering them a link to a place where they can view their monthly bill on the American Express Web site. See American Express, Estatement, at http://www.americanexpress.com/online/cardbill/estatement_splash.shtml (last visited Nov. 5, 2003).

35. See PAUL A. MURPHY, MURPHY & CO., THE MURPHY & CO. EBPP EXECUTIVE REPORT 30 (2003) [hereinafter MURPHY REPORT]. CheckFree enters into contracts with a large number of billers and a large number of bill presentment sites of various kinds and routes the payments from

As compared to conventional paper-based billing processes, those sites can save the substantial costs of preparing and mailing paper bills, as well as the costs of receiving and processing payments by mail.³⁷ A substantial reduction in the costs of customer-support systems will likely result, because many inquiries can be shifted from the telephone to Web-site response systems.³⁸ Those sites also can have considerable marketing advantages, both by enhancing the biller's ability to provide targeted advertising and by enabling the biller to develop more sophisticated customer profiles through the collection of information about bill-paying habits.³⁹ Many consumers also will view the systems as more convenient than traditional paper-based systems.⁴⁰ The biggest problem with these systems is the inefficiency resulting from each consumer's going to a separate site to pay each bill.

In the marketplace, those sites have been moderately successful, particularly for credit card issuers.⁴¹ Because the costs of the technology continue to decrease, more billers may offer such sites as the number of customers necessary for the sites to break even falls.⁴²

the customers to the billers. For a description of the product, see CheckFree i-Solutions, Distribution & Payment (describing CheckFree's i-Processing Service), at http://www.checkfree.com/solutions/distribution_payment/index.html (last visited Oct. 30, 2003).

36. See Andreeff et al., *supra* note 9, at 7, 10 (discussing a variety of payment options).

37. Andreeff and others estimate those savings at about \$80 billion per year under traditional systems. *Id.* at 2–3; see also Dawne Chandler, Electronic Billing: Understanding the Road to Adoption 2 (2002) (DST Output White Paper) (on file with author) (noting the cost savings electronic billing provides); CheckFree, Understanding EBP Models, *supra* note 30, at 1–2 (discussing cost savings of electronic billing); Steve Kille, Leveraging Electronic Statement Delivery 2 (MessagingDirect White Paper) (categorizing the various cost savings in detail), at <http://www.messagingdirect.com/publications/IC-6112.pdf> (last visited Oct. 30, 2003); Lawrence J. Radecki & John Wenninger, *Paying Electronic Bills Electronically*, CURRENT ISSUES IN ECON. & FIN., Vol. 5, No. 1 (Jan. 1999), at 1–2 (estimating costs at \$20 billion), available at http://www.ny.frb.org/research/current_issues/1999.html.

38. See IBM GLOBAL SERVICES, ELECTRONIC BILL PRESENTMENT AND PAYMENT: A STRATEGIC ADVANTAGE 2 (2000) (examining the cost and service advantages of electronic payments), available at http://www-1.ibm.com/services/files/emea_final.pdf; MURPHY REPORT, *supra* note 35, at 93.

39. See Andreeff et al., *supra* note 9, at 4; Chandler, *supra* note 37, at 1–2; IBM GLOBAL SERVICES, *supra* note 38, at 3.

40. Among other things, consumers can save the float caused by early payments by facilitating payments that are made on precisely the date that the bill is due. They also can speed the payment process, if paying at the Web site is a few seconds faster than writing and mailing a check. See Andreeff et al., *supra* note 9, at 3–4; Chandler, *supra* note 37, at 1; IBM GLOBAL SERVICES, *supra* note 38, at 4; Radecki & Wenninger, *supra* note 37, at 4. Those savings would amount to billions of dollars each year. See CheckFree, Understanding EBP Models, *supra* note 30, at 2–3; MURPHY REPORT, *supra* note 35, at 1 (estimating that EBPP would reduce bill-related costs by 26%, translating into \$4.4 billion in annual savings for U.S. consumers).

41. For example, one study estimates that 74% of e-billers were using their own sites by the end of 2000. See Andreeff et al., *supra* note 9, at 6 (discussing the advantages of the biller-direct model).

42. Advances in information technology have lowered those costs substantially. A new system now could be set up for about \$25,000 and pay for itself in just a few years with as few as 3,000 customers. See MURPHY REPORT, *supra* note 35, at 69.

2. *Internet Banking*.—When banks provide sites, they can overcome the biggest problem that biller Web sites face: the need for consumers to pay their bills site by site.⁴³ Thus, at the typical bank site, a consumer can pay any bill necessary by entering onto a form at the site the information that the consumer has about the payment. Smaller banks are likely to outsource all of the payment functions to a third-party provider like CheckFree.⁴⁴ Larger banks may arrange the payments themselves in whatever manner is most cost-effective. For example, if the recipient is a major biller (such as a local utility), the bank may aggregate payments in a batch and pay them with a single ACH transaction. For isolated transactions, the bank might even cut a paper cashier's check and mail it to the recipient. Those sites have been particularly successful in recent years.⁴⁵ One possible reason is that consumers are more willing to trust the necessary financial information to a bank at which they have a depository relationship than to a third party billing them for a payment.

Another advantage, particularly by comparison to the third-party sites discussed below, is the simplicity of operation. The bank is already involved in the payment transaction—whatever type of site the consumer uses—but use of the bank's site obviates the need for involvement of an extra party. Also, many bank sites do not undertake to present bills electronically. Rather, they simply provide an easy method for consumers to pay the bills that are delivered to them by conventional means. Thus, they avoid the complications attendant on electronic presentation of bills,⁴⁶ which is a common feature of the two competing models. Of course, this feature may not be an advantage if consumers desire the functionality available from bill presentment. Thus, it is no surprise that bank sites increasingly offer bill-presentment services.

3. *Third-Party Providers*.—The most ambitious systems are Web sites operated by third parties at which consumers can view and pay all (or almost all) of their bills. The promise of those sites is a future of a single integrated portal, through which all bills will be sent to a consumer and at which the consumer will be able to pay all bills.⁴⁷ The logistical problems of operating such a site are daunting. For one thing, the intermediary operating such a site

43. CheckFree estimates that the "trigger" to induce the typical online consumer to use a consolidated presenter would be if the presenter could deliver five bills per month electronically. CheckFree, Understanding EBP Models, *supra* note 30, at 6.

44. See MURPHY REPORT, *supra* note 35, at 30 (discussing CheckFree's product).

45. See *id.* at 33 (referring to a survey finding that 55% of consumers who pay bills online choose their bank as their preferred site for online financial activities).

46. Many consumers have found those services to be too cumbersome. See Andreeff et al., *supra* note 9, at 7 (arguing that the biller-direct approach may not work as well on the broader consumer market as does bill consolidation).

47. Teri Robinson, *Time to E-Pay the Bills*, INTERNETWEEK.COM, Oct. 23, 2000, at <http://www.internetweek.com/indepth/indepth102300-1.htm>.

(CheckFree, for example) must reach agreements with a large number of billers allowing it to present bills on their behalf and establishing a standardized data format for the information in those bills.⁴⁸ At the same time, the intermediary must persuade enough consumers to use the site to justify the fixed costs of developing the site's technology. Without a critical mass of billers and consumers, the site cannot prosper. This problem is a standard one of bandwagon effects.⁴⁹

When a consumer uses such a site to pay a bill, the process operates much as it does at a bank Web site. The consumer identifies the appropriate bill and authorizes payment. The intermediary, in turn, arranges for the payment to be sent to the biller, normally through an ACH debit entry from the consumer's deposit account.

For billers that do not operate their own sites, these third-party sites offer a significant benefit because of the potential for the cost savings that come from electronic presentation of bills (discussed above as a benefit of biller Web sites).⁵⁰ But the cumbersome nature of the technology to date has made progress slow.⁵¹ Still, if third-party providers can overcome technical problems, they could ultimately become the dominant model.⁵²

III. Designing a Sound Regulatory System

The first step in assessing the adequacy of regulatory protections for the developing Internet payment transactions is to determine the extent to which the consumer protections that apply to existing transactions extend to the new transactions. Two forms of consumer protection are relevant here: information privacy and protection from losses related to fraud or error.

48. In recent years, CheckFree (www.checkfree.com) has become one of the leading players. As discussed in the MURPHY REPORT, *supra* note 35, at 30, 40, Checkfree, in addition to its own site, operates a significant network providing payment services to billers and banks that operate their own sites. The United States Postal Service and Paytrust were significant early players in the area. See U.S. Postal Service, Send Money & Payments, at <http://www.usps.com/money/welcome.htm?from=homedoorwaybar&page=0016money> (last visited Mar. 12, 2003); Paytrust, Complete Bill Management, at <http://www.paytrust.com> (last visited Oct. 30, 2003).

49. See generally JEFFREY H. ROHLFS, BANDWAGON EFFECTS IN HIGH-TECHNOLOGY INDUSTRIES chs. 3-4 (2001) (explaining the importance of supply and demand on bandwagon effects). In the Introduction to his book, Rohlf's defines a bandwagon effect as "a benefit that a person enjoys as a result of others' doing the same thing that he or she does." *Id.* at 1.

50. See *supra* section II(B)(1).

51. See, e.g., Andreeff et al., *supra* note 9, at 8 (explaining that the failure to adopt one industry standard has caused integration issues to persist).

52. There is a consensus that the third-party provider model has the potential to provide the most sophisticated aggregation of bills from a large set of providers. See *id.* at 9. On the other hand, it is not clear whether those providers will be able to convince enough customers and billers to join their systems to gain a major long-term role in the market. See *id.* (stating that the "disadvantages of the consolidation models (namely: security, customer service, high fees, and cumbersome enrollment procedures) may perpetuate the use of the biller-direct model"). Indeed, the most likely outcome is that providers of all three types will survive. See MURPHY REPORT, *supra* note 35, at 43 (predicting that direct billing and third-party aggregation will both remain viable because each appeals to individual consumers in different ways).

The simpler of those forms relates to information privacy. Specifically, under Gramm-Leach-Bliley (GLB), “financial institutions” must not disclose nonpublic personal information to third parties unless they have given their customers an opportunity to opt out of any such disclosures.⁵³ Some might criticize the narrowness of that protection.⁵⁴ It is much narrower, for example, than protections afforded European consumers under the EU’s Data Protection Directive and the statutes that implement it.⁵⁵ But for present purposes,⁵⁶ what is important is that a broad definition of “financial institution” in the applicable regulations means that the rules in GLB apply with just as much force to the new intermediaries as they do to banks and other depository institutions.⁵⁷

It is much more complicated to assess the legal framework that protects consumers from fraud and error, because that framework plainly does not extend completely to the new payment intermediaries. To explain the problems with that framework, the sections that follow summarize the existing framework, the policy choices that it reflects, and how those rules apply to problems likely to arise in the new transactions.

A. Existing Protections Against Fraud and Error

The most general protection for consumers in these transactions comes from the Electronic Funds Transfer Act and Regulation E (which the Federal Reserve has promulgated to implement the EFTA).⁵⁸ The EFTA/E regime applies to any electronic funds transfer (EFT). The statute broadly defines that term to include not only Internet-initiated transactions, but also transactions at an automatic teller machine (ATM) and retail transactions that use a debit card to draw directly on a deposit account.⁵⁹ For any such transaction, the statute generally protects consumers⁶⁰ from losses caused by an unauthorized transaction. Thus, if a consumer loses a debit card, the

53. 15 U.S.C. § 6802(a) (2000) (indicating that financial institutions “may not . . . disclose to a nonaffiliated third party any nonpublic personal information, unless such financial institution provides . . . notice”).

54. For a general introduction to Gramm-Leach-Bliley, including a discussion of some of the most prominent criticisms, see MANN & WINN, *supra* note 2, at 156–60.

55. *See id.* at 184–93 (discussing the Data Protection Directive and the broad protections provided by the Directive to consumers).

56. Part IV considers the concern that the payment intermediary might comply with its privacy obligations less reliably than a traditional depository institution.

57. *See* 16 C.F.R. § 313.3(k)(2)(vi) (2003) (“A business that regularly wires money to and from consumers is a financial institution . . .”). For similar conclusions, see MURPHY REPORT, *supra* note 35, at 109; Jeffrey P. Taft, *Internet-Based Payment Systems: An Overview of the Regulatory and Compliance Issues*, CONSUMER FIN. L.Q. REP., Winter 2002, at 47.

58. The EFTA is codified at 15 U.S.C. §§ 1693–1693r (2000). Regulation E is located in 12 C.F.R. § 205 (2003). The EFTA and Regulation E will be referred to together as EFTA/E.

59. 15 U.S.C. § 1693a(6); 12 C.F.R. § 205.3(b).

60. For purposes of the EFTA and Regulation E, a consumer is any “natural person.” 15 U.S.C. § 1693a(5); 12 C.F.R. § 205.2(e).

consumer's bank would be obligated to restore to the consumer's account any funds removed for transactions that a thief made with the card. Two important exceptions exist. First, the bank can charge the account a deductible of up to \$50 for each series of unauthorized transactions.⁶¹ Second, more importantly, the bank can charge the consumer more—and in some cases the entire amount of the losses—if the consumer does not advise the bank with sufficient promptness after the consumer learns that the card has been stolen.⁶² The EFTA/E regime also provides a detailed dispute-resolution process for resolving claims of errors by the financial institution in charging a consumer's account for a funds transfer.⁶³

For credit card transactions, analogous protections come from the Truth-in-Lending Act (TILA) and Regulation Z (which the Federal Reserve has promulgated to implement TILA).⁶⁴ Two important differences exist between the two regimes. For one thing, the TILA/Z regime provides broader protection for unauthorized losses—consumer responsibility is capped at \$50 even if the consumer fails to notify the bank that the card has been stolen.⁶⁵ Also, the TILA/Z regime grants consumers⁶⁶ a broad right to withhold payment even for authorized transactions if the seller fails to perform as agreed.⁶⁷ As discussed below, the right to withhold provides consumers an important protection against seller fraud.

To the extent that the EFTA/E and TILA/Z regimes are justified, they rest on a series of contestable premises about the ways in which consumers interact with financial institutions. Among other things, they are in tension with the possibility that rational consumers and financial institutions would develop superior methods of allocating the risks and opportunities related to their commercial interactions. Bob Cooter and Ed Rubin have provided the most careful analysis of that problem, identifying a series of defects in the market in which consumers contract with financial institutions.⁶⁸ Perhaps the most persuasive of their points undermines the idea that consumers make informed choices about the relevant terms when they contract with financial

61. 15 U.S.C. § 1693g(a); 12 C.F.R. § 205.6(b)(1).

62. 15 U.S.C. § 1693g(a); 12 C.F.R. § 205.6(b)(2).

63. Among other things, the process requires the institution to return disputed funds to the consumer's account within ten business days of receiving notice of the problem if it cannot complete an investigation of the matter by that date. 15 U.S.C. § 1693f(a); 12 C.F.R. § 205.11.

64. The TILA is codified at 15 U.S.C. §§ 1601–1657 (2000). Regulation Z is located in 12 C.F.R. § 226 (2003). The TILA and Regulation Z will be referred to as TILA/Z.

65. 15 U.S.C. § 1643(a)(1); 12 C.F.R. § 226.12(b).

66. The definition of “consumer” under TILA and Regulation Z is narrower than the definition in the EFTA/E regime, discussed *supra* note 60. It applies only if the funds in question are advanced “primarily for personal, family, or household purposes.” 15 U.S.C. § 1602(h); 12 C.F.R. §§ 226.11, 226.12.

67. 15 U.S.C. § 1661i; 12 C.F.R. § 226.12(c).

68. See Robert D. Cooter & Edward L. Rubin, *A Theory of Loss Allocation for Consumer Payments*, 66 TEXAS L. REV. 63, 68–70 (1987) (identifying defects such as cost of negotiation and asymmetric information).

institutions.⁶⁹ As Cooter and Rubin explain, the rational individual consumer will not expend the time and effort to identify and understand the specific terms of the account agreement with its financial institution.⁷⁰ In contrast, the rational financial institution would expend considerable effort in formulating an agreement that furthered the bank's interests.⁷¹ Thus, it is unlikely that market pressures are driving the terms of consumer deposit-account agreements to an efficient norm.⁷²

A second problem with those rules—as they apply to the conventional credit card and debit card transactions for which they are designed—is that the rules erect distinctions that are difficult to justify as a policy matter. It is easy to accept a distinction between the rules for near-cash transactions with debit cards and the rules for borrowing transactions executed with credit cards. Thus, a merchant that insists on taking cash justifiably might expect the law to accord more finality to the transaction than a merchant that accepts a device as unlike cash as a credit card.

But the differences between the EFTA/E and TILA/Z regimes do not map well to that common-sense transactional distinction. For example, a merchant that accepts a promissory note obviously has less certainty of final payment than one that accepts cash, primarily because of the practical likelihood that the purchaser or borrower may choose not to pay—an option not available to the cash purchaser. But in the conventional credit card transaction, the card issuer by contract with the merchant agrees to accept the risk that the cardholder will fail to pay balances charged on the card for reasons other than assertion of a defense to payment.⁷³ The TILA/Z regime discussed above effectively deprives the merchant of the possibility of making that contract, because any claim of a defect by the consumer will result in an immediate charging of the transaction back to the merchant.⁷⁴

It is easy to see why that right is useful to consumers. And substantial policy reasons can be adduced to support it. For example, merchants might have greater economies of scale and experience in conducting litigation than

69. *Id.* at 69.

70. *Id.* at 68–70.

71. *See id.* at 80–81 (noting that the presence of staff attorneys makes it easy and inexpensive for financial institutions to pursue their legal interests, while consumers face higher legal costs and lower stakes—and thus rarely pursue their legal interests).

72. The market defects that Rubin and Cooter identify are just as likely in the electronic context as they are in the conventional banking context. *Cf.* Kuttner & McAndrews, *supra* note 11, at 42 (doubting that consumers are aware of the legal regime that governs P2P payments).

73. *See* RONALD J. MANN, PAYMENT SYSTEMS AND OTHER FINANCIAL TRANSACTIONS: CASES, MATERIALS, AND PROBLEMS 112–16 (2d ed. 2003).

74. To be sure, it does so indirectly, because the TILA/Z regime directly imposes responsibility for those defenses only on the issuer. But the effect is certain nonetheless, because of the pervasive credit card network rules under which such claims are charged back to the merchant as soon as the customer makes them. *See id.* Moreover, it appears that the applicable dispute-resolution systems are designed to further the interests of issuers rather than merchants (or the institutions that process transactions for them, commonly known in the trade as “acquirers”). My discussions with industry professionals suggest that they generally are regarded as biased in favor of the cardholder.

consumers. If so, placing the burden of litigation on the merchant by putting the money in the hands of the consumers when the dispute begins might produce results that are more equitable by offsetting the merchant's advantages.

But it is not clear why it is appropriate for that rule to extend to credit card transactions but not to debit card transactions. The difficulty in justifying the distinction only grows with the continuing convergence in the functions of the two products. For one thing, roughly forty percent of consumers use the credit card entirely as a convenience device, repaying their entire bill each month.⁷⁵ Why should their transactions have some special protection solely because of the possibility that they could choose not to pay for the transactions before interest began to accrue? Similarly, as more and more merchants accept debit cards at the point of sale, is it plausible as a policy matter that a consumer's right to withhold payment should depend on which particular piece of plastic the consumer swipes through the payment terminal? Cutting the point even more finely, with the advent of cards that include both credit and debit features, it is even harder to justify the availability of the right to withhold payment turning on the way in which the consumer interacts with the merchant's payment terminal (especially if that terminal is specifically designed to lead the consumer to choose the debit option rather than the credit option that would give the consumer a greater withholding right).⁷⁶

Finally, several of the distinctions in the details between the TILA/Z and EFTA/E regimes can be explained by nothing other than differences in the level of concern for consumers in the differing Congresses that enacted them.⁷⁷ For example, what policy basis justifies the differing definitions of consumers in the two systems,⁷⁸ the differing protections for unauthorized transactions,⁷⁹ and the differing definitions of billing errors from which consumers are protected?⁸⁰

75. See CardWeb.com, Inc., Bank Credit Card Convenience Usage—Current, at http://www.cardweb.com/carddata/charts/convenience_usage.asp (last visited Nov. 17, 2003) (copy on file with the author).

76. Interestingly, the main justification for the interface design is the lower interchange merchants pay for debit card transactions than for credit card transactions, not the greater rights the customers obtain in the credit card transactions. See David Breitkopf, *PIN-Signature Debit Tug-of-War Escalates*, AM. BANKER, Feb. 25, 2002, at 6 (discussing the conflicting interests of merchants and customers, which prefer PIN-based debit, and banks, which prefer signature debit).

77. I owe this explanation to Bob Rasmussen, which I adopt for lack of a better one of my own. See also Cooter & Rubin, *supra* note 68, at 91 (attributing some differences to “pure guesswork and political necromancy”).

78. Compare *supra* note 66 (discussing the definition of “consumer” in the TILA/Z regime), with *supra* note 60 (discussing the definition of “consumer” in the EFTA/E regime).

79. Compare *supra* text accompanying note 65 (discussing unauthorized transaction rules in the TILA/Z regime), with *supra* text accompanying note 62 (discussing unauthorized transaction rules in the EFTA/E regime).

80. Compare TILA, 15 U.S.C. § 1666(c) (2000), and Regulation Z, 12 C.F.R. § 226.13 (2003) (together defining billing error to include, among other things, any transaction for “goods or

From a broad perspective, the incoherence of those distinctions suggests that the system would be improved by the articulation of a set of general legal rules to govern consumer payment systems. Those rules presumably would eradicate many of the distinctions that current law draws between functionally similar payment systems. At the same time, they plausibly might include distinctions between face-to-face and remote (telephone, mail-order, and Internet) transactions. For current purposes, the distinctions are important not because of the possibility that some future legislature might remove them. They are important to this project because they have been carried over into the Internet payment transactions—the focus of this Article—with no more coherence in that context than they have in the context where those distinctions developed.

B. Protections Against Fraud and Error in the New Transactions

Unfortunately, the legal framework protecting consumers against fraud and error has not been updated to accommodate the new transactions. Thus, that framework includes three types of problems: situations where the incoherent distinction between the TILA/Z and EFTA/E regime is replicated in the new environment, minor oversights in regulatory drafting, and more significant omissions in regulatory coverage. The sections below discuss how those rules apply to the new transactions and underscore those problems where they arise.

1. P2P Transactions.—Current experience suggests that fraud is a serious problem in P2P transactions. One Federal Reserve researcher estimates that PayPal's fraud rate of 0.66%, albeit much lower than the rate of online credit card fraud, is about four times the rate of fraud for retail credit card transactions and more than sixty times the rate for retail debit card transactions.⁸¹ But the legal rules for determining whether the consumer bears the losses from that fraud depend in an important way on how the consumer pays for the transaction. To see the point, imagine an eBay auction in which a fraudulent seller never ships any goods to the buyer.⁸² If the transaction is funded from the purchaser's account with the P2P provider, it

services . . . not delivered to the obligor . . . in accordance with the agreement made at the time of a transaction"), with EFTA, 15 U.S.C. § 1693f (2000), and Regulation E, 12 C.F.R. § 205.11 (2003) (together giving a much narrower definition of "error").

81. See Tim McHugh, *The Growth of Person-to-Person Electronic Payments*, CHI. FED. LETTER, Aug. 2002, at 2 (estimating effective fraud rates for credit cards at 0.15%, debit cards at 0.01%, and online credit card transactions at 2.50%), at http://www.chicagofed.org/publications/fedletter/2002/cflaug2002_180.pdf.

82. The situation is not hypothetical. See, e.g., *Scam Casts Doubt on eBay's Anti-Fraud Software*, MERCURY NEWS, Mar. 21, 2003 (discussing a recent scam in which an Arizona couple stole \$100,000 from more than 500 bidders), at <http://www.siliconvalley.com/mld/siliconvalley/5450291.htm> (last visited Nov. 2, 2003).

is an EFT governed by the EFTA.⁸³ In that event, the purchaser has no right, either against the financial institution or the P2P provider, to recover the funds for an authorized transaction solely because of a complaint about misconduct by the seller, however meritorious the complaint. The same analysis applies if the purchaser funds the transaction by authorizing a transfer directly from the purchaser's deposit account. This type of transaction is also an EFT covered by the EFTA/E regime.⁸⁴

But if the buyer has the good luck (or foresight) to fund the purchase directly from a credit card, the transaction is governed by the TILA/Z regime. Thus, among other things, the purchaser should have the right to withhold payment if the seller in fact never supplies the goods.⁸⁵ The statute grants a broad right to the cardholder to withhold payment based on "all claims (other than tort claims) and defenses arising out of any transaction in which the credit card is used as a method of payment."⁸⁶ Thus, if the transaction through PayPal is viewed as a single unified transaction in which the auction purchaser uses PayPal and the credit card to buy something from an auction seller, the TILA/Z regime protects the purchaser.⁸⁷ As discussed above, it is odd to have such an important protection turn on something that is as trivial to the transaction as the method by which the purchaser funds the transaction to the P2P provider. But it is not any more odd to see that distinction here than it is to see it in the conventional point-of-sale context.

The other likely type of fraud is for a third party to obtain the consumer's PayPal login information and use that information to conduct an unauthorized transaction by drawing on the consumer's PayPal account.⁸⁸ If the interloper draws directly on the P2P account, Regulation E makes the

83. The EFTA defines an "electronic fund transfer" as a "transfer of funds . . . initiated through an electronic terminal . . . so as to . . . authorize a financial institution to debit or credit an account." 15 U.S.C. § 1693a(6); *see also* 12 C.F.R. § 205.3(b) (giving a similar definition).

84. *See supra* note 83 (quoting the relevant statutory language).

85. In the framework of the statute, the bank attempting to collect the credit card bill would be subject to the defense that the PayPal purchaser never received the goods it purchased. *See supra* note 67 and accompanying text (discussing the TILA/Z right to withhold payment).

86. 15 U.S.C. § 1666j(a).

87. The statute could be read more narrowly. American Express, for example, apparently has argued that the transaction is one in which PayPal is the seller and that PayPal has satisfied its obligation by sending money to the seller. On that understanding, American Express (or any other card issuer with the boldness to raise the argument) would have no obligation to respect the defense under 15 U.S.C. § 1666j. Even American Express, however, receded from that position after it was challenged recently by the New York Attorney General. Ina Steiner, *American Express Agrees to Honor PayPal Complaints*, AUCTIONBYTES.COM, Oct. 3, 2003, at <http://www.auctionbytes.com/cab/abn/y03/m10/i03/s01>. My students' reaction to this question convinces me that the reading advanced by American Express is a plausible one. Accordingly, a revision of Regulation Z to remove that ambiguity would be useful.

88. That is the point of some of the most prominent recent schemes directed at PayPal customers. *See* Alorie Gilbert, *PayPal Users Targeted by Email Scam*, CNET NEWS.COM, Mar. 10, 2003 (discussing a recent scam involving e-mails fraudulently purporting to be from PayPal), at <http://news.zdnet.co.uk/hardware/emergingtech/0,39020357,2131645,00.htm>

P2P intermediary directly responsible: subject to the normal exceptions, the P2P provider cannot charge the consumer's account for the transaction.⁸⁹ The same result applies under the TILA/Z regime if the interloper uses the information to draw funds from the consumer's credit card.⁹⁰

The only ambiguity applies if the interloper uses the information to withdraw funds from the consumer's deposit account. In that event—because of an odd glitch in the regulation—it seems that neither the P2P provider nor the bank is obligated to return the funds to the consumer's deposit account. The bank apparently is not obligated because it is entitled to treat the transaction as authorized. A transaction is authorized under the EFTA if it is executed by a party (the P2P provider in this case) to whom the consumer has given the relevant access information.⁹¹ Because that fact makes the transaction “authorized” with respect to the account from which funds were drawn, it appears that the rules related to “unauthorized” transactions impose no obligation on the P2P provider for the loss. The most likely source of recovery for the consumer would be an action against the P2P provider's depository institution (the entity that originated the ACH transfer) for a breach of the applicable National Automated Clearing House Association (NACHA) warranties.⁹² Because of the limited litigation to date in that area, it is difficult to assess the likelihood of prevailing in such an action.⁹³

This problem, however, is not a serious one. Unlike the incoherent boundary between the EFTA/E and TILA/Z regimes, which is a somewhat more permanent feature of our system, this problem seems to be a simple glitch, which the Federal Reserve easily could remedy on its own volition.⁹⁴

89. The intermediary is a financial institution under 15 U.S.C. § 1693a(8) and 12 C.F.R. § 205.2(i). Because the transaction is unauthorized, the intermediary cannot remove more than \$50 of funds from the account under 15 U.S.C. § 1693g(a). *See also* 12 C.F.R. § 205.6(b)(1) (limiting consumer liability for unauthorized transfers to \$50 if the financial institution is timely notified of loss or theft). If the intermediary does remove more than \$50, it must restore the funds within ten business days of proper notice under 15 U.S.C. § 1693f(c) and 12 C.F.R. § 205.11(c)(2)(i).

90. 12 C.F.R. § 226.12(b) (2003).

91. *See* 15 U.S.C. § 1693a(1) (2000) (defining “accepted card or other means of access”); *id.* § 1693a(11) (defining “unauthorized electronic fund transfer”); 12 C.F.R. § 205.2(a)(1) (2003) (defining “[a]ccess device”), *id.* § 205.2(m) (defining “[u]nauthorized electronic fund transfer”).

92. *See* NACHA OPERATING RULE § 2.2.1.1 (2003) (describing the warranty of authorization by the Originator of an ACH transfer); *see also* MANN, *supra* note 73, at 157–65 (discussing generally the ACH system and the legal framework that governs it).

93. The limited cases to date suggest that all parties to the transaction arguably have a claim for breach of that warranty. *See, e.g.,* *Sec. First Network Bank v. C.A.P.S., Inc.*, No. 01-C-342, 2002 WL 485352, at *6 (N.D. Ill. Mar. 29, 2002) (permitting suit by a victim of fraud against a bank that executed unauthorized ACH transfers).

94. One simple response would be to add a new subsection 205.14(b)(3) to Regulation E stating as follows:

Any unauthorized transaction that results in the removal of funds from the account at the financial institution will constitute a billing error for purposes of Section 205.11(a)(1), for which the payment service provider is responsible under Section

2. *EBPP Transactions*.—Because of the variety of business models, it is difficult to provide a comprehensive schema of the types of transactions that pose risks for consumers. But one simplifying factor is the general absence of credit card payments from those transactions. This absence means that the legal issues focus almost entirely on the reach of the EFTA/E regime,⁹⁵ rather than its boundary with the TILA/Z regime. The simplest approach is to look separately at the risks posed by each of the three prevailing business models.

a. *Biller Web Sites*.—The most likely difficulty is an unjustified payment to the biller. The biller might pay one consumer's bill from another consumer's account or it might pay itself for a bill even if the consumer did not in fact authorize payment. Interestingly enough, the EFTA/E regime would not provide protection in either case. As discussed above, the consumer cannot claim that the transactions are "unauthorized" for purposes of the EFTA/E regime.⁹⁶ For similar reasons, the consumer cannot claim that they amount to an "error." The statutory definition of "error," albeit vague, is directed to errors by the bank, not errors by a third party to whom the consumer has granted access.⁹⁷ Thus, the statute offers the consumer no recourse in that situation. Given the likely solvency of the typical billing entity, perhaps the situation is not unduly troublesome, but it does seem inconsistent with the general philosophy of the EFTA/E regime as applied to conventional transactions.

b. *Internet Banking*.—The framework for Internet banking is the simplest. Because there is no intermediary,⁹⁸ the financial institution takes all actions regarding the account. Accordingly, the rules in the EFTA/E regime apply directly to protect the consumer from unauthorized transactions and errors.

205.14(a), if the transaction involves the use of either (A) the access device issued by the payment service provider to the customer or (B) the access device provided by the consumer to the payment service provider for the account at the financial institution.

Because subsection 205.14(b)(2) plainly implements the error-resolution procedures as against the payment service provider, the proposed subsection would ensure that the provider is obligated to restore funds to the consumer's account at the consumer's bank just as quickly as the bank would have to restore funds for a traditional unauthorized transaction.

95. See 12 C.F.R. § 205.3(b)(1)(vi) (Supp. I 2003) (including within the definition of "electronic fund transfer" the "payment made by a bill payer under a bill-payment service available to a consumer via computer or other electronic means").

96. See *supra* note 91 and accompanying text.

97. 15 U.S.C. § 1693f(f) (2000).

98. As discussed *supra* note 35, an intermediary (such as CheckFree) might come between the bank and the payee. But this is irrelevant to the concerns of this Article, because no intermediary would come between the consumer and the institution that holds the consumer's deposit account. To put it another way, it is plain that Regulation E would protect the consumer from mistakes by CheckFree operating as an intermediary between the bank and the payee.

c. Third-Party Providers.—As the discussion above suggests, the harshest results for consumers come from the third-party systems because the insertion of an intermediary enhances the likelihood that the EFTA/E regime will not apply. Two general problem transactions are apparent:

(1) *Interloping and Erroneous Bills.*—In this scenario, a malefactor fabricates a bill and has the provider send it to the consumer. Alternatively, and less maliciously, the bill is a legitimate one that, because of an error by the intermediary, is posted and distributed to the wrong consumer. Suppose that the consumer pays the fraudulent or erroneous bill. For the reasons discussed above, the consumer will not be able to claim that the transaction is either unauthorized or a remediable error.⁹⁹ Of course, in this particular transaction it is easy to fault the consumer for not detecting the spoofed bill. But in many of the existing cases of Internet fraud, a consumer of ordinary sophistication would not necessarily have recognized the problem. Imagine a bill purporting to come from your local electric utility, in a format visually identical to the electric bill you receive every month, which arrives 29 days after your last bill and is in an amount approximately equal to that bill. Your first hint of a problem is likely to come when the legitimate bill appears the next day. Given that problem (a variation on the new Internet crime called “phishing”),¹⁰⁰ it is reasonable to consider whether intermediaries should bear those losses. If they were responsible for those losses, they might be better motivated to develop technology to detect such infiltrations.¹⁰¹ For present purposes, the important point is that the existing legal rule for this situation reflects pure happenstance rather than a reasoned resolution of the economic and policy issues.

(2) *Interloping Payments.*—In this scenario, the intermediary makes a payment based on an instruction from an interloping malefactor rather than the consumer. As with the analogous P2P transactions, the ambiguity in the regulation’s coverage of unauthorized transactions leaves a substantial possibility that the consumer has no protection.¹⁰²

3. *Summary.*—Although the discussion in the preceding sections might seem unduly detailed, the level of detail is important to show how difficult it is to design a system to govern the transactions in question. Neither the EFTA nor Regulation E is particularly old. They are not supervised by a regulatory agency out of touch with the developments in these transactions,

99. See *supra* notes 91, 97 and accompanying text.

100. “Phishing” is defined as “[c]reating a replica of an existing Web page to fool a user into submitting personal, financial, or password data.” The Word Spy, Phishing, at <http://www.wordspy.com/words/phishing.asp> (last visited Nov. 2, 2003).

101. See Cooter & Rubin, *supra* note 68, at 89 (making that point generally).

102. See *supra* notes 91–93 and accompanying text.

and many of the most informative papers in the area are written by Federal Reserve staff,¹⁰³ particularly by members of the group studying emerging payments in its Chicago branch. The point is that these transactions are developing so rapidly and with such fertile inventiveness that it is difficult to expect any regulatory system to keep pace and ensure coherent coverage as long as the system is premised on the categorical distinctions that drive the current framework.

Thus, even with a coherent response to the problems addressed above, new problems may emerge rapidly, leaving the regulatory coverage again uncertain. Such problems are inevitable until and unless a more functional code is adopted to govern electronic payments generally. Meanwhile, the minor change discussed above¹⁰⁴ could at least make the system as coherent for these transactions as it is for conventional transactions.

IV. Ensuring Regulatory Compliance

Part III of this Article operates entirely within the framework of the existing regulatory apparatus. Thus, it is limited to considering the extent to which GLB and the EFTA/E and TILA/Z regimes replicate for the new transactions the regulatory environment that they impose on conventional transactions. This Part examines the regulatory system from a broader perspective. It starts by focusing on a fundamental problem implicit in the existing system: the distinction between the level of responsibility to be expected from conventional financial institutions and that to be expected from the new Internet-based intermediaries. It then discusses three types of potential regulatory approaches. Finally, it summarizes tentative recommendations for the P2P and EBPP contexts based on what we currently know about them.

A. The Problem

The EFTA and TILA use the typical apparatus of the modern federal regulatory statute: provisions for class actions, statutory damages, attorney fees, and the like.¹⁰⁵ Accordingly, it would be natural to conclude that a careful analysis of the problems discussed in Part III of this Article should be enough to resolve the problem. Once the EFTA/E and TILA/Z regimes are brought up to date, we might think that the new entities would comply and all would be well.

But two general concerns make that optimistic outlook seem implausible. First, it is doubtful that the kinds of civil-liability regimes at hand, which rely primarily on litigation by small and dispersed consumers, will be able to control the behavior of the large businesses at which they are

103. *See supra* note 11.

104. *See supra* note 94.

105. EFTA, 15 U.S.C. § 1693m (2000); TILA, 15 U.S.C. § 1640 (2000).

directed, particularly when the facts of each unauthorized transaction and billing error often will be specific to each individual consumer.¹⁰⁶

Second, the pervasive federal regulation of banks substantially increases the likelihood that banks will comply with their obligations under the TILA/Z and EFTA/E regimes. At the most basic level, the direct purpose of much of federal banking regulation—federal supervision of capital maintenance and lending practices—is to ensure the solvency and fiscal prudence of the institutions.¹⁰⁷ If that regulation is even marginally effective,¹⁰⁸ it increases the likelihood that banks will have the assets necessary to comply with their obligations under those statutes. That might seem like a small thing, but the likelihood that a major Internet payment fraud could create a regulatory responsibility beyond the assets of a small dotcom P2P provider is plausible.¹⁰⁹ That possibility is particularly true given the likelihood that those providers will be targets for fraudulent activity, as PayPal has been.¹¹⁰ More generally, the persistent supervision and need to accommodate regulators on a regular basis makes it quite difficult for a bank to adopt a cavalier attitude about regulatory compliance.¹¹¹

106. See, e.g., Cooter & Rubin, *supra* note 68, at 80–82 (discussing difficulties consumers face in suing financial institutions).

107. See, e.g., Alvin C. Harrell, *Deposit Insurance Issues and the Implications for the Structure of the American Financial System*, 18 OKLA. CITY U. L. REV. 179, 179–80 (1993).

108. For general economic analysis of the effects of the American system on the incentives of institutions and their customers, see Jonathan R. Macey & Geoffrey P. Miller, *Bank Failures, Risk Monitoring, and the Market for Bank Control*, 88 COLUM. L. REV. 1153, 1200–01 (1988) (discussing the use by institutions of brokered deposits to regain solvency); Robert C. Merton, *An Analytic Derivation of the Cost of Deposit Insurance and Loan Guarantees*, 1 J. BANKING & FIN. 3, 3–5 (1989) (noting the problems small depositors and financial institutions face in guaranteeing the safety of the deposits and recommending governmental guarantees); Kenneth E. Scott, *Deposit Insurance and Bank Regulation: The Policy Choices*, 44 BUS. LAW. 907, 908–11 (1989) (describing problems faced by financial institutions in the 1980s and the possible causes). Considerable doubt exists about how to design an optimal banking regulatory system. For insightful discussions of other systems, see Curtis J. Milhaupt, *Japan's Experience with Deposit Insurance and Failing Banks: Implications for Financial Regulatory Design*, 77 WASH. U. L.Q. 399 (1999); Geoffrey P. Miller, *Is Deposit Insurance Inevitable? Lessons from Argentina*, 16 INT'L REV. L. & ECON. 211 (1996).

109. See Kuttner & McAndrews, *supra* note 11, at 41–42 (discussing the liquidity risk that would arise if payment intermediaries handled larger numbers of transactions and the regulations that limit that risk for banks); Spiotto & Mantel, *supra* note 11, at 20 (noting “the rapid emergence in the past two years [before 2001] of small aggregators with few assets”).

110. See Gilbert, *supra* note 88 (describing a fraudulent e-mail scheme designed to elicit bank and credit card account numbers from PayPal users); Christopher Null, *Bogus Alerts Target PayPal Users*, WIRED NEWS, Feb. 14, 2003 (discussing schemes that sent PayPal users to bogus sites at www.paypai.com and www.paypalsys.com), at <http://www.wired.com/news/ebiz/0,1272,57673,00.html>; Rosencrance, *supra* note 9 (describing an e-mail scheme designed to gain access to the bank accounts of PayPal users).

111. Consider the pervasive preoccupation with a bank's Community Reinvestment Act obligations by regulators examining wholly unrelated transactions. See Kenneth H. Thomas, *CRA at 25: Reforming an Almost Perfect Law*, AM. BANKER, Dec. 13, 2002, at 6 (noting that the CRA requires the “federal bank and thrift agencies [to] periodically assess an institution's CRA record

The same analysis applies to privacy obligations. It does not take a hardened cynic to think that the chances of systematic noncompliance—or even lackadaisical compliance that tolerates a significant number of low-level violations—is much more likely for unregulated companies than for regulated depository institutions.¹¹² In assessing that likelihood, it is important to note that GLB, unlike TILA and the EFTA, does not provide for a private cause of action.¹¹³ Finally, it also is worth wondering whether smaller companies that are unregulated and financially constrained will be adequately motivated to expend the resources necessary to protect their consumer's information from unauthorized access by third parties.

To put the point generally, the regulatory regimes directed to the activities of the new payment intermediaries depend in part for their effectiveness on the background regulatory supervision of the banks governed by those regimes. Because nonbank payment intermediaries are not generally subject to that supervision,¹¹⁴ there is a cognizable risk that they will show less care in complying with those regimes than conventional depository institutions.¹¹⁵ The next section discusses three types of potential responses to that problem.

B. Potential Responses

Because of the fluid and rapid pace of development in the industry, it is difficult to design a response to the regulatory gap discussed in the previous section. Accordingly, I start in this section with a general analysis of the pros and cons of three general approaches: doing nothing, adopting more onerous regulation of Internet payment intermediaries, or imposing liability on banks for the failure of the intermediaries to comply with their regulatory obligations. The Article concludes in the next section with an application of that analysis that includes tentative recommendations on the best course of action under current circumstances.

and consider that record when acting on branch or merger applications”). The parallel is not perfect, of course, because the CRA is specifically designed to lead to the conditioning of merger transactions on a good record of CRA compliance, *see id.*, but the point still seems valid. The pervasive control of banking regulators makes it seem most difficult for a bank consciously to maintain a pattern of regulatory noncompliance.

112. *See* Radecki & Wenninger, *supra* note 37, at 5 (discussing banks' motivation to protect their customers' privacy and the steps banks have already taken to increase information security).

113. *See* 15 U.S.C. § 6805 (2000) (authorizing enforcement by regulatory authorities); MANN & WINN, *supra* note 2, at 159.

114. *See supra* notes 6–7 and accompanying text.

115. *See* Kuttner & McAndrews, *supra* note 11, at 42 (noting that protecting customers against fraudulent use of their accounts “is a major concern”); Mester, *supra* note 11, at 16 (“[T]hey still deserve monitoring. For example, they may expose individuals and institutions using them to substantial liability through fraud.”).

1. *Doing Nothing.*—The first possibility is to do nothing. At this point, the concerns expressed above are largely (though not entirely)¹¹⁶ conjectural. An advantage of the current system is that it permits ready entry into the market, which has facilitated rapid development of the competing business models and vigorous competition among the various providers. Thus, the P2P market is growing rapidly and already has experienced a considerable shakeout of weaker and unsuccessful providers.¹¹⁷ The EBPP market is even more fluid, so it is too soon to predict exactly what types of services these providers will offer.¹¹⁸ Inevitably, any regulatory intervention would heighten barriers to entry in the industry. The barriers would be likely to have the immediate effect of limiting competition, particularly by smaller and newer companies.¹¹⁹ Thus, regulatory intervention might drive intermediaries from the market, even if their model might have prevailed in the marketplace.¹²⁰

In assessing the weight of that concern, it is necessary to credit the importance of “network” or “bandwagon” effects¹²¹ in this industry.¹²² Thus, PayPal’s success in the P2P market shows some of the signs of a successful implementation of a lock-in strategy: an early effort to acquire customers by offering services at a very low (indeed, negative) price. This strategy led to rapid growth of a customer base and was followed in turn by the imposition

116. See *infra* notes 159 (discussing existing complaints about P2P providers) & 166 (discussing existing complaints about EBPP providers) and accompanying text.

117. See *supra* notes 16–18 and accompanying text.

118. See, e.g., Andreeff et al., *supra* note 9, at 4–10 (discussing the different EBPP presentment models used by various competitors, and evincing an inability to predict which, if any, of the existing models will succeed in the market).

119. I assume a considerable economy of scale and learning curve in enduring regulatory burdens.

120. Cf. Andreeff et al., *supra* note 9, at 9 (stating that “[a]lthough industry experts suspect that consumers will ultimately prefer to have all of their bills presented at one location, the disadvantages of the consolidation models (namely, security, customer service, high fees, and cumbersome enrollment procedures) may perpetuate the use of the biller-direct model”).

121. For general discussion of how those effects can lock in an early industry leader’s success, see ROHLFS, *supra* note 49, at 43; CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES* ch. 5 (1999). As Rohlfs explains, the basic idea is that some products have external demand-side scale economies—features external to the production process that make demand for products increase as the number of units of the product already sold increases. See ROHLFS, *supra* note 49, at 55. For a well-reasoned skeptical view about the common occurrence of lock-in, see generally STAN J. LIEBOWITZ & STEPHEN E. MARGOLIS, *WINNERS, LOSERS & MICROSOFT: COMPETITION AND ANTITRUST IN HIGH TECHNOLOGY* (1999) (collecting and amplifying a substantial body of periodical literature by Liebowitz and Margolis).

122. See Kille, *supra* note 37, at 3 (noting that “sufficient use by recipients” is the “KEY requirement for successful” use of electronic presentation of bills); James J. McAndrews, *Network Issues and Payment Systems*, BUS. REV. (Fed. Res. Bank of Phila.), Nov./Dec. 1997, at 15, 22–24 (noting a number of examples in the payments context, including ATM adoption and PIN-based debit cards), available at <http://www.phil.frb.org/econ/br/br97.html>; Mester, *supra* note 11, at 14–15; Radecki & Wenninger, *supra* note 37, at 5 (discussing the importance of “network effects” to e-billing system developers).

of substantial transaction fees.¹²³ Without that kind of sustained effort, it is very difficult for that type of network good to obtain a sufficient critical mass of users to reach the maximum optimal level of deployment. It would be unfortunate if a well-intentioned regulatory intervention had the effect of stifling the competition necessary for such products to be introduced successfully. On the other hand, the absence of regulatory intervention may enhance the possibility that the competition will go beyond robust to unfair. But that concern seems less significant given the fact that the existing players—the ones who would be at risk of harm from unduly aggressive competition—are financial institutions (presumably capable of protecting themselves from such conduct).

2. *Direct Regulation of Intermediaries.*—The second possibility is to adopt some form of regulatory supervision for Internet intermediaries. The benefits of that approach are obvious. First, it enhances protections for consumers by providing a backstop to the direct legal obligations of intermediaries, parallel to the backstop that federal regulatory authorities provide for banks. Second, it levels the playing field left uneven in the present arrangement, in which banks always are subject to intensive regulatory supervision but Internet payment intermediaries are subject to little or no supervision.

The first issue is to decide what type of regulatory system would be appropriate. Because the entities are not themselves holding demand-deposit accounts, the case for full-scale bank regulation is quite weak. Among other things, Internet intermediaries are not subject to the kinds of “runs” that make the stability of depository institutions an important object of public policy.

Accordingly, the appropriate form of regulation would be something less intrusive, similar to the existing regulation of money transmitters (to which PayPal is subject in many states).¹²⁴ That regulation generally requires businesses to obtain a state license,¹²⁵ imposes periodic reporting requirements,¹²⁶ and subjects them to audits by state officials.¹²⁷ It also often

123. See Leuty, *supra* note 24, at 1–2 (discussing the development of PayPal’s fee and revenue structure); SHAPIRO & VARIAN, *supra* note 121, ch. 6 (discussing frankly how to execute a successful lock-in strategy). In economic terms, the problem is how to obtain a sufficiently large critical mass of users to allow expansion of the market to the maximum equilibrium user set. See ROHLFS, *supra* note 49, at 20–28. For case studies on successful and unsuccessful attempts to obtain that critical mass, see *id.*, ch. 6–13.

124. PayPal, State Licenses (listing jurisdictions in which PayPal is licensed, along with the corresponding governing statutes and regulatory agencies for each jurisdiction), at <http://www.paypal.com/cgi-bin/webscr?cmd=p/ir/licenses-outside> (last visited Nov. 3, 2003).

125. See, e.g., ARIZ. REV. STAT. ANN. § 6-1202 (West 1999); 205 ILL. COMP. STAT. ANN. § 657/10 (West 2000); MINN. STAT. ANN. § 53.02 (West 2002); TEX. FIN. CODE ANN. § 152.201 (Vernon Supp. 2003); VA. CODE ANN. § 6.1-371 (Michie Supp. 2003).

126. See, e.g., ARIZ. REV. STAT. ANN. § 6-1211 (West 1999).

127. See, e.g., 205 ILL. COMP. STAT. ANN. § 657/55 (West 2000).

includes minimum net worth¹²⁸ or bond requirements¹²⁹ or imposes restrictions on permissible investments.¹³⁰

The next issue is to decide at what level the regulations should be imposed. Money transmitters currently are regulated at the state level, not the federal level.¹³¹ As that industry has become more consolidated, considerable pressure has arisen for more uniformity in the various state regulatory schemes.¹³² That pressure, in turn, has led to the recent drafting and promulgation of the proposed Uniform Money Services Act (UMSA) (already adopted in Iowa, Vermont, and Washington).¹³³ Although that statute probably would not apply to EBPP providers in its current form, its substantive provisions provide a useful and up-to-date template for regulation.

The difficult question is whether state, rather than federal, regulation is appropriate. Inconsistent state regulations are more problematic for Internet-based businesses.¹³⁴ This is particularly true as the share of cross-border payments increases, which raises the prospect of regulation by the several states of this country and foreign countries.¹³⁵ Thus, although the simplest

128. See, e.g., N.J. STAT. ANN. § 17:15C-5 (West 2001); TEX. FIN. CODE ANN. § 152.203 (Vernon Supp. 2003).

129. See, e.g., ARIZ. REV. STAT. ANN. § 6-12105 (West 1999); 205 ILL. COMP. STAT. ANN. § 657/30 (West Supp. 2003).

130. See, e.g., ARIZ. REV. STAT. ANN. § 6-1212 (West 1999); 205 ILL. COMP. STAT. ANN. § 657/50 (West 2000); MINN. STAT. ANN. §§ 53B.06, 53B.08 (West 2002).

131. However, the operation of an unlicensed money transmitter business is a federal criminal offense. 18 U.S.C. § 1960 (2000).

132. See Taft, *supra* note 57, at 43 (noting that the popularity of new payment technologies and the inconsistency of the states' regulatory approaches led the drafters to broaden the scope of the UMSA to include the new products and services).

133. For the text of the final version of the Act (promulgated in 2001), see UNIF. MONEY SERVS. ACT (2001), available at <http://www.law.upenn.edu/bll/ulc/moneyserv/UMSA2001Final.pdf> (last visited Nov. 3, 2003) [hereinafter UMSA]. For discussion of the drafting and promulgation of the UMSA, see Taft, *supra* note 57, at 43-44. For enactment updates, see Nat'l Conference of Comm'rs on Unif. State Laws, *Legislative Activity by Act (2002-2003)* (showing current enactment in Iowa and Washington), at <http://www.nccusl.org/nccusl/LegByAct.pdf> (last visited Nov. 3, 2003).

134. The irrationality of subjecting Internet-based businesses to widely varying state regulatory schemes has been the principal reason that Congress persistently has protected those entities from state sales and use taxes. See Internet Tax Freedom Act, Pub. L. No. 105-277, 112 Stat. 2681-719 (1998) (imposing a three-year moratorium on a variety of Internet-related taxes); Internet Tax Nondiscrimination Act, Pub. L. No. 107-75, 115 Stat. 703 (2001) (extending the moratorium to November 1, 2003). The recent willingness of states to harmonize their sales-tax systems—spurred by their serious needs for new revenues—may convince Congress to remove the bar on such taxation. See Brian Krebs, *Study Questions Net Tax Payoff*, WASH. POST.COM, Mar. 13, 2003 (explaining that potential lost tax revenues may give states sufficient incentive to simplify their tax systems), at <http://www.washingtonpost.com/wp-dyn/articles/A21580-2003Mar13.html>. Thus, if the States could coalesce around something like the UMSA, the costs of state regulation might diminish considerably.

135. The problem will be even more complicated if the use of P2P providers to send international transfers becomes a significant market. Currently, that market is dominated by depositary institutions like CitiBank. See *supra* note 20 (discussing international P2P transfers).

path for the time being might be to foster broad enactment of regulations similar to the UMSA (broadened to cover EBPP providers), it is difficult to believe that anybody trying to design a rational system would conclude that parallel regulation by all local jurisdictions is the most appropriate way to regulate the Internet-based entities under discussion.

A second possibility would be to allow regulation of the intermediary in a particular state jurisdiction in which the intermediary could be said to be located.¹³⁶ Internet scholars have tried hard to resolve such choice-of-law questions to make a territorial allocation of regulatory authority.¹³⁷ To the extent those efforts speak to this question, they generally suggest that each jurisdiction in which the consumers reside would have the power to regulate the entities in question.¹³⁸ But scholars have not achieved a clear consensus about a basis for a particular location taking the regulatory lead, largely because there is a clear consensus that the location of the physical aspects of the system (the Web server that contains the Web site, for example) should not be dispositive.¹³⁹

Moreover, even if a consensus could be reached, under which all of the states (and affected foreign countries) would agree that a single state has the sole power to regulate the entity, a substantial problem would remain in the gross lack of symmetry between the reach of the regulated market (basically national, with international aspects) and the constituency of the regulator (statewide). Relying on basic public-choice concepts, the lack of symmetry imposes a substantial risk that the jurisdiction in which the intermediary is located will adopt rules unduly favorable to the intermediary. This risk is particularly salient if the jurisdiction obtains substantial benefits from the location of the intermediary in the jurisdiction (through employment or taxes), while most of the intermediary's customers are located in other jurisdictions.¹⁴⁰

PayPal, however, is beginning to play a significant part in that market as well and has experienced some widely noted difficulties. See Drew Cullen, *Brits! Play the PayPal Currency Speculation Game*, REGISTER, Feb. 27, 2003 (describing errors caused by an incorrect dollar-pound exchange rate at the PayPal site), available at <http://www.theregister.co.uk/content/6/29508.html>; Drew Cullen, *PayPal Reimburses Brits*, REGISTER, Mar. 1, 2003 (describing plans to reimburse customers who overpaid for dollar-pound conversions), available at <http://www.theregister.co.uk/content/6/29532.html>.

136. See, e.g., U.C.C. § 9-307(e) (2003) (adopting a bright-line rule for purposes of personal property lending that a corporation is located in the jurisdiction under whose laws it is organized).

137. E.g., American Bar Association Global Cyberspace Jurisdiction Project, *Achieving Legal and Business Order in Cyberspace: A Report on Global Jurisdiction Issues Created by the Internet*, 55 BUS. LAW. 1801 (2000) [hereinafter ABA Cyberspace Jurisdiction Project].

138. *Id.* at 1905–15 (discussing jurisdictional issues for payment systems and banking services provided over the Internet).

139. See *id.* at 1908–11 (remarking that technology has diminished the significance of the system's physical components for jurisdictional purposes regarding activities in Cyberspace).

140. This argument is parallel to the race-to-the-bottom argument in corporate law. Whatever the truth of the matter on that issue, the problem seems more serious here because of the lack of symmetry discussed in the text.

The basic problem is that the issues that motivate the regulation are not sufficiently related to state-level variations and circumstances to make state-level regulation optimal. Thus, perhaps the best approach would be a federal statute. This proposition does not suggest that state law-enforcement authorities are not so interested in the closely related problem of money laundering that they will resist any lessening of their authority in the area. But it is to say that these issues of consumer protection are more likely to be addressed optimally at the federal level.

At the federal level, the simplest response would be to require these services to be provided by banks, which would obviate the need for any specific regulatory legislation. But as discussed above, the business that these intermediaries operate suggests that bank-type regulation is unduly onerous. Thus, a better approach would be regulatory legislation tailored for these intermediaries. It might seem implausible in the current environment to expect Congress to create a new federal regulatory regime,¹⁴¹ particularly when the regime seems to fall in the area of commercial law that Congress traditionally has left to state regulation. On the other hand, the recent experience of the Check 21 Act (passed by both houses of Congress during its current legislative session)¹⁴² suggests that the Board of Governors of the Federal Reserve enjoys a sufficiently influential position with Congress to

141. The poor response to Federal Reserve efforts to consider the appropriate level of regulation for stored-value cards is the most obvious example. The story starts with the Federal Reserve's proposal of some mild regulations. See *Electronic Fund Transfers*, 59 Fed. Reg. 10684 (proposed Mar. 7, 1994) (to be codified at 12 C.F.R. pt. 205) (proposing revisions to the *Electronic Fund Transfers Act of 1978*). Hostile reaction led the Federal Reserve to change the regulatory proposal into a report to Congress. *BD. OF GOVERNORS OF THE FED. RES. SYS., REPORT TO THE CONGRESS ON THE APPLICATION OF THE ELECTRONIC FUND TRANSFER ACT TO ELECTRONIC STORED-VALUE PRODUCTS* (Mar. 1997), available at http://www.federalreserve.gov/boarddocs/rptcongress/efta_rpt.pdf. Adverse reaction to that report led the Federal Reserve to effectively table it, and no action has been taken in the six years since the report was sent to Congress. See Taft, *supra* note 57, at 45 (suggesting that the Fed did not pursue the proposal because "concerns about hindering the development of new technology prevailed over additional protections for consumers using stored-value products"). This outcome is of course an obvious change from previous decades, when it was plausible to think that Congress would step in to protect consumers when neither the UCC nor the Federal Reserve would take action. See Robert D. Cooter & Edward L. Rubin, *Orders and Incentives as Regulatory Methods: The Expedited Funds Availability Act of 1987*, 35 *UCLA L. REV.* 1115, 1130–50 (1988). Indeed, the hostility to any new regulation poses a substantial obstacle to the suggestions that I make in Part III, *supra* note 94 and accompanying text.

142. The House on June 5, 2003 passed the Check 21 Act, H.R. 1474, 108th Cong. (2003). The Senate on June 26, 2003 passed its version, the Check Truncation Act, S. 1334, 108th Cong. (2003). The statute generally is designed to facilitate the processing of checks by means of images instead of the cumbersome paper originals. For the explanation from the Federal Reserve (which drafted the statute), see Fed. Res. Bd., *Check Clearing for the 21st Century Act*, at <http://www.federalreserve.gov/paymentsystems/truncation/default.htm> (last visited Nov. 3, 2003). The same topic was within the mandate of the Drafting Committee recently charged with promulgating revisions to UCC Articles 3 and 4 (for which I was the Reporter). The Committee was unable to pursue that topic because of its inability to produce a consensus regarding an appropriate reconciliation of the interest in technological advance with the concerns of consumers about continuing to receive their cancelled checks. The Federal Reserve, of course, is free to proceed at the federal level without such a consensus.

obtain enactment of legislation designed to ensure the effective operation of the payment system. Given the interest that researchers at the Federal Reserve's constituent banks have taken in these developments,¹⁴³ it is not far-fetched to think that the Federal Reserve might take the lead in developing such a statute.

3. *Regulating Banks as Gatekeepers.*—The final approach is the most adventurous: directly obligating banks to ensure compliance with the EFTA/E and TILA/Z regimes for all transactions at the bank. The premise here is to view the bank as a gatekeeper that will both monitor the intermediary to ensure that it behaves appropriately and exclude those that cannot be induced to behave appropriately.¹⁴⁴

Because the problems discussed in Part III arise only if the intermediaries can access accounts at the bank, the bank is theoretically in a position to control the activities of the intermediaries. For example, the simplest response to such a scheme might be for the bank to provide by contract that the intermediary would be responsible to the bank for the costs that the bank incurs for Regulation E compliance related to transactions that the intermediary conducted on the accounts of the bank's customers. The bank would take the cost-effective steps to minimize the costs that it incurs from any failure of the intermediary to satisfy those obligations: it might require the intermediary to obtain a letter of credit from another institution, post a bond, or simply deposit a reserve of funds in the bank against which the bank could draw for those expenses.

This approach has several benefits. One obvious benefit is that it protects consumers from asset insufficiency on the part of the intermediaries.¹⁴⁵ The gatekeeper strategy is uniquely suited to situations in which practicable legal remedies are not adequate to ensure full compliance with regulatory responsibilities.¹⁴⁶ Another potential benefit relates to the likelihood that the banks on which the risk of loss ultimately would fall are larger, better capitalized, and more diversified in the range of their operations than the intermediaries for whom the banks are to be the gatekeepers. Specifically, if the greater size and financial sophistication of the banks

143. For examples of work on these developments by Federal Reserve researchers, see Kuttner & McAndrews, *supra* note 11; Mester, *supra* note 11; McHugh, *supra* note 81.

144. For the most general formulation of this regulatory structure, see Reinier H. Kraakman, *Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy*, 2 J.L. ECON. & ORG. 53 (1986) [hereinafter Kraakman, *Gatekeeper Anatomy*]. Within Kraakman's framework, this regulatory structure would be an instance of the use of gatekeeper liability to remedy enforcement insufficiency. For a general discussion, see Reinier H. Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L.J. 857, 888–96 (1984) [hereinafter Kraakman, *Corporate Liability Strategies*].

145. See Kraakman, *Corporate Liability Strategies*, *supra* note 144, at 869–71 (discussing the potential benefit of gatekeeper strategies).

146. See Kraakman, *Gatekeeper Anatomy*, *supra* note 144, at 56.

makes it more cost-effective for them to bear and spread those losses, then the gatekeeper regime would lower the total cost of those losses.¹⁴⁷

A more general benefit is that the bank should be more effective at monitoring the activities of the provider than government regulators, because the bank arguably¹⁴⁸ would have a strong incentive—maximizing the value of the account services received by its customers—to ensure that the regulations that it imposes on the intermediaries do not unduly burden the activities of the intermediaries. If the bank attempts to exclude those intermediaries by imposing excessive burdens on them—burdens that are not cost-justified—the bank would reduce the net value of the services that the bank could extract from its customers. If so, we might expect customers to migrate to banks that reach more effective arrangements with the intermediaries.

The banks should be in a better position than any government regulator to assess in a dynamic and informed way the relative benefits and burdens of various responses that the bank might take in response to a gatekeeping responsibility.¹⁴⁹ For example, the banks are likely to assess the legitimacy of the activities of the intermediary more knowledgeably than any regulator.¹⁵⁰ In addition, it seems unlikely that the banks would cooperate with the intermediaries in misconduct—a particularly topical concern in gatekeeping arrangements in a post-Enron environment.¹⁵¹

In sum, the bank would be in a position to make intelligent, market-driven choices about how to trade off expenditures on monitoring the activities of the intermediary versus simple reliance on monetary assurances from the intermediary or bonds from fiscally responsible third parties. This choice is particularly important given the complicated, technology-sensitive, and rapidly developing nature of the industry.

147. See Kraakman, *Corporate Liability Strategies*, *supra* note 144, at 864–67.

148. This discussion assumes that the bank is not motivated by an anti-competitive desire to stifle the intermediary's service. I discuss that problem *infra* notes 156–57 and accompanying text.

149. In Kraakman's terms, this regime is a "chaperone" regime, in which "gatekeepers can detect and disrupt misconduct in an unfolding relationship" with enforcement targets. Kraakman, *Gatekeeper Anatomy*, *supra* note 144, at 63.

150. See Stephen Choi, *Market Lessons for Gatekeepers*, 92 NW. U. L. REV. 916, 925–27 (1998) (emphasizing the importance of "screening accuracy" to a successful gatekeeper strategy); Kraakman, *Corporate Liability Strategies*, *supra* note 144, at 891 (emphasizing the importance to successful gatekeeper strategies of "low-cost access to information about firm delicts"). Assaf Hamdani explores the risks and advantages of various gatekeeper strategies and the appropriate scope of gatekeeper liability in great detail in an as yet unpublished working paper. Assaf Hamdani, *Assessing Gatekeeper Liability* (Jan. 2003) (preliminary and incomplete working draft, on file with author).

151. See John C. Coffee, Jr., *Understanding Enron: "It's About the Gatekeepers, Stupid"*, 57 BUS. LAW. 1403 (2002); Kraakman, *Gatekeeper Anatomy*, *supra* note 144, at 69–72 (emphasizing the importance of avoiding "corruption" of gatekeepers); Kraakman, *Corporate Liability Strategies*, *supra* note 144, at 891 (emphasizing the importance of using "incorruptible outsiders" as gatekeepers).

The gatekeeper approach presents several obvious problems. First, it would be likely to increase the costs of the bank's activities, and thus the costs of the services provided to the bank's customers. In an era when the number of consumers who are priced out of the market for banking services already is sufficiently high to be a cause for policy concern,¹⁵² any initiative that might aggravate that problem warrants serious scrutiny. But the twin premises of this approach would be (1) that those costs would not be substantial unless there was a significant risk that the intermediaries would fail to comply if left to their own devices (thus letting those costs fall on consumers in any event); and (2) that the banks are much better situated than government agents to identify and minimize those costs.

Another problem with this approach is that it does not address privacy issues at all. Because a simple monetary remedy—restoring funds improperly removed from the consumer's deposit account—does not as easily remedy privacy issues, this type of remedy offers no protection on that score.

Another obvious problem is technological: the effectiveness of the approach depends entirely on the ability of banks in fact to control the conduct of the intermediaries.¹⁵³ As the controversy over screen-scraping suggests, it is not clear that current technology permits banks to prevent intermediaries from accessing their customers' accounts without their consent, because it is difficult for the bank to distinguish between two different persons accessing the Web site. If both the intermediary and the customer have the customer's user ID and password, the bank's server probably will not be able to ascertain which of the two is accessing the account on any particular occasion.¹⁵⁴ If this problem is true, then technology alone will not permit the bank to use the threat of exclusion to control the intermediary's access.

152. See, e.g., Molly Hooper, *No-Cost Checking for Poor and Elderly Killed in California Senate Committee*, AM. BANKER, May 29, 1985, at 3; Consumers Union, Consumers Union Policy Statement on Electronic Money and Banking (Apr. 1997) ("The potential impact of new payment and banking technology on the availability and affordability of traditional banking and payment services is immediately troubling."), at [http://www.consumersunion.org/finance/elect\\$.htm](http://www.consumersunion.org/finance/elect$.htm).

153. See Hamdani, *supra* note 150, at 40 (observing that, all else being equal, when gatekeepers are more effective at preventing wrongdoing, strict liability for gatekeepers is more desirable); Kraakman, *Gatekeeper Anatomy*, *supra* note 144; Kraakman, *Corporate Liability Strategies*, *supra* note 144, at 890 ("The first requisite for gatekeeper liability is, of course, an outsider who can influence [the subject] to forgo offenses.").

154. The controversy over the use of screen-scraping by financial institutions to collect comprehensive profiles of their customers' financial affairs strongly suggests this problem, because that controversy rests on the premise that the "screen-scraaper" can scrape information from another bank's Web site without the knowledge of the bank operating the site. E.g., Andreeff et al., *supra* note 9, at 9; Andrew Roth, *CheckFree Says It Will Use Screen Scraping*, AM. BANKER, Mar. 22, 2001, at 10 (describing screen scraping as "a practice by which information is simply lifted from a Web site, generally without the site owner's permission or knowledge").

That technological problem seems unlikely to be a serious problem of regulatory design. It would be easy enough to impose a general prohibition (akin to the Consumer Fraud and Abuse Act, 18 U.S.C. § 1030 (the CFAA)) on accessing a customer's account without the consent of the bank.¹⁵⁵ With a broadening of the CFAA, intermediaries would not be able to access deposit accounts without permission from the bank. The bank, in turn, could condition its permission on the formation of a contract relationship with the intermediary that would include whatever terms were appropriate to implement the bank's responsibility for regulatory compliance.

Finally, the most serious difficulty with that approach is the possibility that it will have a markedly adverse competitive effect. As the discussion above emphasizes, both the P2P and EBPP markets currently include a number of nonbank entities competing directly against banks.¹⁵⁶ Although a regime in which banks control access to the accounts for which payment intermediaries provide services may not be as exclusive as a regime in which those services can be provided only by banks, the potential for anti-competitive conduct is obvious. If applicable regulations permit banks to impose onerous terms on the intermediaries, then the bank's ability to drive those providers from the marketplace might be enhanced.¹⁵⁷

On the other hand, this kind of conduct would be effective only if banks as a group colluded to exclude the intermediaries. As discussed above, a bank that tried to impose undue burdens on intermediaries to exclude them from the bank's customers would face competition from other banks that might try to maximize the value of services they could provide to their own customers by entering into value-increasing arrangements with intermediaries.¹⁵⁸ Because the banking industry is highly competitive, it is doubtful that collusive exclusionary tactics would be effective. Moreover, particularly in light of the competitive structure of the banking industry, it may be reasonable to rely on traditional antitrust enforcement to protect providers from such practices.

155. Screen scraping and EBPP services generally do not violate this statute because the screen scrapers and EBPP providers have authorization from the customer. *But see infra* note 166 (discussing settled litigation in which First Union Bank claimed that PayTrust's procedures violated the Computer Fraud Abuse Act).

156. *E.g.*, Chandler, *supra* note 37, at 2 (noting the competition between banks and newer entrants over the new "delivery channels"); Jane Kaufman Winn, *Clash of the Titans: Regulating the Competition Between Established and Emerging Electronic Payment Systems*, 14 BERKELEY TECH. L.J. 675 (1999) (noting the rise of new payments entities to compete with the existing businesses).

157. The hostility of banks to intermediary access to their accounts is not purely hypothetical. For example, see the litigation between First Union and PayTrust mentioned *infra* note 166.

158. *See supra* text accompanying note 148.

C. Recommendations

For several reasons, it is not plausible at this stage to offer a definitive “answer” to the problem of regulatory strategy that this Article addresses. For one thing, the industries are developing and changing so rapidly that the object of inquiry is a moving target. For another, information about how the systems in fact operate is scarce, and it is difficult to assess the weight of the competing concerns. We know next to nothing about the rates of fraud and error in these systems, the culture of data privacy in the industry, and the degree of compliance with regulatory responsibilities. Finally, because the possible risks of allowing unregulated access to consumer deposit accounts and of hasty intervention in a fluid competitive situation are not readily balanced against each other, an element of frank judgment is necessary to resolve a conflict between them.

Still, the analysis of the alternatives presented above does support some tentative recommendations about the most promising avenues of relief. The recommendations that follow take the perspective that the correct answer to the problem provides consumers protections as close to what they have for conventional financial relationships as seems practicable, without unduly harming the potential for competition and innovation in the industry. Those recommendations reflect in part an attempt to foster outcomes likely to be consistent with consumer expectations. The recommendations also reflect an implicit willingness to place considerable weight on concerns about privacy issues. It seems much more troubling from a privacy perspective to have consumer financial information in the hands of wholly unregulated and thinly capitalized companies than in the hands of banks. In any event, because the recommendations rest heavily on those perspectives, it is worth emphasizing that policymakers who do not place as much importance on these concerns would reach different conclusions.

1. *P2P Intermediaries.*—Selecting a regulatory approach for the P2P intermediaries is difficult for a variety of reasons. First, because of the persistent allegations of misconduct by PayPal—none of which, to be sure, seems to have resulted in any proof of serious misconduct—it seems unacceptable to have PayPal completely unregulated.¹⁵⁹ At the same time,

159. I have no basis for forming an opinion about the merits of those allegations. I simply note that they are quite numerous. For eBay’s formal disclosure about litigation related to those problems, see EBAY INC., FORM 10-Q, at 15 (Nov. 14, 2002) (reporting for the quarterly period which ended on September 30, 2002), available at <http://www.shareholder.com/Common/Edgar/1065088/891618-02-5206/02-00.pdf>. For news stories about those problems, see, for example, Craig Bicknell, *Anti-Fraud That’s Anti-Consumer*, WIRED NEWS, July 24, 2000 (noting the frustration of a customer whose credit card was deemed suspicious by PayPal’s anti-fraud program), at <http://www.wired.com/news/business/0,1367,37642,00.html>; Dan Knight, *PayPal Insecurity*, MACMUSINGS, Aug. 8, 2002 (expressing the concern that “all it takes is hacking a password to rob someone blind”), at <http://lowendmac.com/musings/02/0808.html>; Keith Regan, *PayPal Users Sue Over Frozen Funds*, E-COM. TIMES, Mar. 13, 2002 (discussing a lawsuit alleging failure to comply

the competitive landscape shows a tension between PayPal—now owned by eBay—and smaller competitors primarily controlled by banks. In that setting, it seems particularly inappropriate to use the gatekeeper strategy to subject PayPal's operations to the control of the banking industry. For the same reason, it seems absurd to say that P2P services must be provided by a bank. That requirement simply forces eBay to sell PayPal to a bank. The evident synergy between PayPal's operations and eBay's suggests that any such outcome would unnecessarily destroy some significant opportunity for innovation in the provision of payment services.¹⁶⁰

My views on that point are strongly influenced by the potential of PayPal to be a major competitive figure as Internet payment systems develop in the years to come. For example, it is a well-known aspect of the Internet that the payment systems available for Internet retailers are wholly inadequate: they are both expensive and subject to high rates of fraud¹⁶¹ (the costs of which are born directly by the retailers). Yet, the major credit card networks have retained a dominant near-monopoly position in that market.¹⁶² PayPal is already one of their strongest competitors, as it provides payment services to smaller merchants that find it uneconomical to join Visa or MasterCard directly.¹⁶³ An unconstrained PayPal may have the potential to be a risk for consumers. But, at the same time, an unconstrained PayPal that forces Visa, MasterCard, and the banking industry to look constantly over their shoulders could do more for the competitiveness of Internet payment providers than any pressure that the Antitrust Division of the Department of Justice has brought to bear.¹⁶⁴

More broadly, the introduction of this Article notes the persistent failure of electronic-money products to take hold on the Internet. If there is a market for a new and innovative electronic-money product, the likelihood that such a product will be developed, implemented, and deployed successfully is maximized by a regulatory system that permits the continuing

with Regulation E), at <http://www.ecommercetimes.com/perl/story/16751.html>. Two sites collecting criticisms of PayPal are www.paypalwarning.com (last visited Nov. 3, 2003), and www.paypalsucks.com (last visited Nov. 3, 2003).

160. See, e.g., Peter Lucas, *eBay Puts Its Mark on PayPal*, CREDIT CARD MGMT., Apr. 2003, at 34 (discussing eBay's strategic use of its control of PayPal).

161. See ePaynews.com, US Credit Card Fraud Statistics, *supra* note 1. The basic Visa electronic commerce interchange rate, for example, is 1.80% plus \$0.10. That is considerably higher than the base (CPS Retail) rate of 1.37% plus \$0.10. See Cardweb.com, Inc., Visa Interchange, at <http://www.cardweb.com/carddata/charts/MerchantFees/2002/visa.html> (last visited Nov. 17, 2003) (copy on file with author).

162. See *supra* note 1.

163. See Mantel & McHugh, *supra* note 5, at 5–6 (noting the potential for P2P providers to provide competition in the provision of payment services to small businesses).

164. The government has, however, recently obtained a trial-court judgment against Visa and MasterCard in an antitrust action challenging several aspects of the industry's structure. *United States v. Visa, Inc.*, 163 F. Supp. 2d 322 (S.D.N.Y. 2001).

presence of a large player like PayPal not wedded to the existing payments networks.

The foregoing comments seem to leave a choice between doing nothing and adopting the light federal regulatory regime previously discussed.¹⁶⁵ Doing nothing of course does not leave PayPal completely unregulated, because it already is under the supervision of money-transmitter statutes in a number of states. And the events to date make it difficult to be sure that the risk of duplicative or inappropriate regulation—either excessive or too lenient—will cause problems. In any event, in a perfect world, a single federal arrangement would make more sense. Given the fact that PayPal's parent eBay already must comply with the increasingly onerous requirements that come with its listing on NASDAQ, it seems unlikely that those requirements would impose costs that would have competitive significance to PayPal. And at the same time they should go far to assuage the concerns summarized above about PayPal's responsibility for its regulatory obligations.

2. *EBPP Intermediaries*.—It is much harder to come to rest on a recommendation for the EBPP systems. Because their operations necessarily involve pervasive access to consumer deposit accounts, privacy and fraud concerns are more substantial than in the P2P context. P2P providers by contrast, are likely for many consumers to conduct their operations without any mechanism for accessing the consumer's deposit account. To be sure, reports of problems with the EBPP systems to date are few,¹⁶⁶ but the fluidity of the highly fractionated market gives little basis for confidence that all members of the industry will be responsible. Thus, it seems unacceptable to think that the current regulatory framework will be suitable in the end.

At the same time, it seems excessive to say that only banks can provide those services. Among other things, a rule limiting those services to banks would significantly diminish the likelihood of a universal payment service. In the end, one can make a strong case that such a site is at least part of the

165. See *supra* section IV(B)(2).

166. PayTrust has generally gotten good marks on such questions. See, e.g., Don Willmott, *Bill Payment*, ZDNET, Nov. 28, 2000 (lauding insurance for negligent and fraudulent transactions), at <http://www.zdnet.com/products/stories/reviews/0,4161,2658209,00.html>; *PayTrust: On Being Trustworthy to Pay the Bills*, EXAMINER (discussing PayTrust's security efforts), at <http://www.theexaminer.biz/Security/paytrust.htm> (last visited Nov. 3, 2003). On the other hand, one Federal Reserve analyst has noted a conspicuous lack of common error-resolution services by EBPP providers. Mantel, *supra* note 2, at 26–27.

More specifically, even PayTrust has had some legal problems. For example, First Union Bank sued PayTrust, arguing that PayTrust's activities involved the unauthorized extraction of data from the bank's Web site, in violation of the Computer Fraud and Abuse Act, 18 U.S.C. § 1030. The lawsuit reportedly settled after changes in some of PayTrust's practices. See ALAN CHARLES RAUL, PROTECTING FACTUAL DATA (June 2000), at http://www.sidley.com/cyberlaw/features/protecting_fd.asp. It is not clear, of course, whether that litigation reflects a failure of PayTrust to respect consumer privacy or an anticompetitive desire by First Union to exclude PayTrust from its accounts.

optimal response, because it would be easier for it to overcome the classic bandwagon-effects problems of attracting sufficient billers and consumer payers as customers.¹⁶⁷ Of course, such a site still could develop in a “bank-only” approach, through contracts by individual banks with a dominant provider like CheckFree. A serious cost of the bank-only approach is the possibility it will lessen the potential for such a service.

That leaves for consideration the intermediate approaches of industry-specific regulation and the use of banks as gatekeepers. The gatekeeper approach has several positive qualities. It would permit a tempered¹⁶⁸ market experiment of competition between the more sophisticated universal model, on the one hand, and the simpler Internet banking and biller models, on the other hand. Thus, it would help reveal the strength of consumer preferences for the different models.¹⁶⁹ At the same time, it would provide the strongest assurance that consumers in fact would be protected from losses from fraud and error.

But the gatekeeper approach would do nothing to ensure the privacy of consumer information: it is feasible to require banks to hold deposit accounts unharmed from unauthorized transactions, but it is much more problematic to require them to ensure that intermediaries comply with their privacy obligations. A light scheme of federal regulation like the one discussed above¹⁷⁰ could include monitoring of data-privacy compliance to assuage that concern. Moreover, the gatekeeper approach creates a substantial risk of anti-competitive conduct by banks tempted to exclude their nonbank competitors.¹⁷¹ A separate federal regulatory apparatus would avoid that problem.

V. Conclusion

This Article is not an effort to write the last word on Internet payment intermediaries. Rather, it is an opening effort to explore the policy issues raised by the ongoing developments in the industry. It sets the way for two steps of response. First, Part III suggests some minor updating to make the existing rules apply more coherently to the new transactions. The types of transactions that this Article discusses have reached a volume and level of

167. See, e.g., CheckFree, Understanding EBP Models, *supra* note 30, at 3–4 (discussing industry research suggesting the long-term superiority of that option); MURPHY REPORT, *supra* note 35, at 40, 42 (highlighting faster consumer adoption as a benefit of “aggregator/consolidator” models of EBPP).

168. The experiment is tempered because of the dampening on competition inherent in the gatekeeper approach.

169. One industry analyst argues cogently that the typical consumer eventually will come to use an aggregate site for most bills, and direct sites for a few important bills (such as a credit card) for which the consumer is more concerned about reviewing bill details. See MURPHY REPORT, *supra* note 35, at 43.

170. See *supra* section IV(B)(2).

171. See *supra* section IV(B)(3).

stability that warrants adjustment of the regulatory regime. The basic premise of those adjustments is that consumers should not lose the protections they would have under conventional systems solely because they access those systems through a new Internet interface or intermediary. The need to allow experimentation among competing technologies does not require absolving those that conduct novel new payment transactions from the responsibilities that are customary for the conventional transactions conducted using the systems on which they rely.

Second, as discussed in Part IV, there are serious questions about the adequacy of the background framework that protects against abuses of the system either by those in the industry or by third parties attempting to take advantage of them. It certainly is important to give developing sectors of commerce an opportunity to stabilize before intervening with regulation that might freeze the industry's structure too soon. But there also is a substantial risk in waiting too long. Here, it is not at all clear that we know enough to make sensible decisions about the appropriate policy responses. The suggestions in Part IV are intended to be just that—illustrations of one way of resolving the various policy concerns based on one set of assumptions about the relevant facts and weight of the affected interests.

If anything, it is clear that a more informed decision could be made after a thorough study by a responsible entity of the federal government (such as the Federal Reserve), using its power to collect information from the industry. Such a study could provide an empirical sense of the significance of the problems that this Article discusses and develop a balanced solution that is sensitive to all the relevant interests.