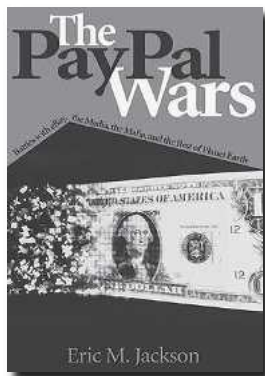
Battling the Government, the Mafia, and the Rest of Planet Earth

Reviewed by William L. Anderson

THE PAYPAL WARS
by Eric M. Jackson
344 pages; Los Angeles, Calif.: World Ahead Publishing, 2004

ONCE UPON A TIME, there existed the Land of the New Economy. It was a place where old rules did not apply and where the suffix ".com" was the sign that vast wealth could be created by the simple issuance of common stock. The requirements of earnings (or even "potential" earnings)—not to mention the presence of a real product—were seen as so Old Economy that they had no place in this New Land.



As we know in hindsight, those very clever "New Economy" commercials from the 2000 Super Bowl were not the heralding of a new era in business, but rather the last utterances of some business firms that soon would disappear forever. We did not realize it at the time, but the myth that a bunch of 20-somethings on motorized scooters could circumvent the laws of supply and demand was about to explode.

Yet, just because the New Economy crashed and burned with the plummeting of the NASDAQ, we should not forget that this heady era was not a complete dry hole. For many of us, the Internet, which was just breaking into our lives a decade ago, is now a commonplace part of our lives. Webvan, e-Toys, and Pets.com may have disappeared into cyberspace and bankruptcy court, but more than a few readers of this review will purchase or sell something on eBay this week. And many of the people who will engage the World Wide Web for trade most likely will use their trusty PayPal accounts to consummate the purchase.

If you are one of those people, you might want to offer some thanks to Eric M. Jackson, author of *The PayPal Wars*. No, Jackson did not invent PayPal, the convenient, easily accessible online payment system, but he was the person who first explored the idea of eBay buyers and sellers using PayPal as the vehicle for payment. As it would turn out, PayPal would be the ideal mechanism to allow a vast number of users to consummate their exchanges.

Before going further, let me say that *The PayPal Wars* is not just a book about how a startup company managed to survive in the modern high-tech business atmosphere. There is more—much more—to the story. *The PayPal Wars* should resonate with the readers of *Regulation* because the role of regulation is an important theme of this book—but not in the conventional sense of how regulation may work or not work. Instead, we find that the story of PayPal is one in which entrepreneurs attempted to create a financial product that was relatively unregulated—but, not surprisingly, the regulatory empire struck back.

A BUSINESS IS BORN The PayPal story is one of stages. In the beginning, there was the fledgling company that began with a vision. The second stage was continued existence in the face of competition from other companies, a merger gone wrong, and an assault by organized crime. The third stage was the almost-miraculous initial public offering, but it was here that the dreary realities of the regulatory state came to the fore. Finally, at least for Jackson and the company's founders, there was the semi-happy ending in which people rode off into the sunset with large wads of cash in hand.

PayPal was started by two entrepreneurs, Peter Thiel, a hedge fund manager from California, and Max Levchin, a Ukrainian-born engineer who specialized in security. They had a most interesting idea: Having seen the sad results of the Asian currency collapses of the late 1990s, Thiel and Levchin saw an opportunity to create a system in which people could protect their own monetary holdings by quickly exchanging their own currency for another via computer transactions.

The beauty of the system, as Thiel saw it, was that this new product would give average people an opportunity to move their money—an ability that, at that time, was available only to those wealthy enough to afford offshore accounts. PayPal was to be an "egalitarian tool," something that would be available to people of average means. Furthermore, because PayPal would permit its users to have options that previously were not available to many of them, it would have a secondary effect of keeping governments from forcing people to keep their money in banks after a round of inflation or other irresponsible governance.

Before Jackson came aboard in December 1999, the young Stanford graduate had been an analyst with the accounting firm formerly known as Arthur Andersen, which he describes as an Old Economy entity. When Thiel, a friend from their Stanford days, offered Jackson the prospect of stock options—a common form of compensation in the days when Silicon Valley was the nation's hot spot for economic growth—Jackson decided to enter the world of the New Economy. The description of his first days with PayPal is something out of the Silicon Valley stereotype of the "unstructured" (or, as they say in the Old Economy, "disorganized") workplace:

I introduced myself to the recep-

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tionist, who had no idea that I was expected. She quickly circled the office only to conclude that Peter was not in the building. Her call to his cell phone went straight into voice-mail, prompting her to ask if I could come back later. I began to feel uneasy—I had just burned my Andersen bridges for an unspecified position without so much as an offer letter because Peter said I needed to start immediately, and now he was nowhere to be found.

Jackson's misadventures continued for awhile until he found Thiel, but it took a while longer before he had any sense of the duties he would perform for the fledgling firm. His makeshift desk was set up in the company's ping-pong room (another New Economy feature) and he took on the title of director of marketing. His real value to the company, however, became manifest while he was surfing the Internet one night.

Logging onto the site of the auction giant eBay, Jackson quickly realized that PayPal would be a perfect mechanism to permit large numbers of buyers and sellers to consummate their transactions quickly. Jackson recognized that small sellers who could not afford to use a credit card service would have to wait until the check or money order from the buyer arrived a week or so later in the mail—a very low-tech approach to what supposedly was a high-tech transaction. Because of the ease of obtaining a PayPal account, almost anyone with a modem and credit card could use the service. Thus, while the foray into eBay might have seemed as though the company was veering from its original mission, in the end it would be the company's bread-and-butter for growth.

PROFIT OR PERISH Of course, a good idea—and a mechanism for pursuing that idea—inspires entry into the market, and it was not long before PayPal had competition from other services, including Yahoo!, Bank One, and eBay itself. Jackson, Thiel, and company had to deal with the dicey problems of competition, not to mention the fact that PayPal was not turning a profit but was very good at burning through its available cash. In other words, the company needed to produce or go out of business.

To deal with its burn rate (and to attract new investors), the company engaged in a number of innovations. First, it managed to entice fee-paying customers—a major feat, given that the original PayPal accounts were free (with the company making money on the floats). Second, it developed a paying mechanism to permit customers to use their bank accounts instead of credit cards, which enabled PayPal to lower its credit card transaction fees. Third, the company was forced to deal with foreign organized crime rings, which were funding their PayPal accounts with stolen credit card numbers. While the criminals, led by a shadowy figure who called himself Igor, seemed to have an upper hand, Levchin's talents in creating security devices ultimately saved the company from having the crooks drive it into bankruptcy. In the meantime, Igor unwittingly helped PayPal develop an automated fraud-detection tool that Levchin appropriately named "Igor." (As the story goes, the real Igor met an untimely death at a San Francisco nightclub a year later.)

GOING PUBLIC In short, the company began to turn a profit, which ultimately made it a candidate for IPO. PayPal signed up more than 5 million users in its first year, and another 7 million the next. Usage grew steadily and billions of dollars ($5 billion in the first two years) flowed through the system. By late 2001, not only was PayPal profitable, but it had done so despite the crash that sent so many other Web-based companies into cybergraves, not to mention the September 11 attacks and their aftermath.

And that is when PayPal began battling its most formidable opponents: regulatory agencies, state governments, class-action lawyers, and the ever-present Eliot Spitzer. None of those battles resulted from regulatory violations committed by the PayPal executives, but instead were the result of various people's decisions to use the mechanism of the state to extort money from a successful company.

On the eve of PayPal's IPO, for example, Louisiana's Office of Financial Institutions suddenly decided the firm needed a money transmitter's license in order to operate in that state. The decision was more than a little surprising given that transmitter's licenses are intended to regulate banks and PayPal is not a bank. But that did not stop the regulators, as well as some representatives of the American Bankers Association, from trying to impose "consumer protection" measures against an entity that some banks feared could somehow, someday pose some competition to financial institutions.

PayPal was ultimately able to deal with Louisiana, but then it came up against the Securities and Exchange Commission. The SEC threatened to kill the entire IPO because a market research firm published an independent study that found PayPal to be the most popular online method of payment. According to the SEC, this was a violation of the agency's "quiet period" that comes before the approval of an IPO. Understand that the study was independent and PayPal had nothing to do with the research firm's actions, but nevertheless a bureaucrat at the SEC had to rattle his cage.

Even after the company was able to go through with the IPO (PayPal began to trade on NASDAQ on February 15, 2002), the parade of parasites did not stop. Next came class-action lawsuits by lawyers who claimed that the fraud detection mechanisms used by PayPal to hamper the efforts of the Russian mafia unduly hampered some people who clearly were not Mafiosi. Then there were the issues dealing with enforcement of the Patriot Act and other legislation passed in the wake of 9/11.

Last but not least was New York's Attorney General Eliot Spitzer, who was incensed that some individuals used PayPal to pay for their online gambling activities. Even though the practice was legal (or, at least, there was no federal law against such commerce), Spitzer demanded what was, in effect, an extortion payment in exchange for his deciding not to litigate the company into a post-Enron state. Understanding their unhappy position, the executives at PayPal sent a check to the New York AG's office.

There clearly are financial advantages for firms to be publicly traded, but it did not take the PayPal brass very long to understand that the regulatory and legal pitfalls facing such companies were more than they would be able to handle. Thus, they sold the firm to eBay.

THE MORAL There are a number of lessons in the PayPal story. First and most

important, entrepreneurial genius still lives in the United States and there is no shortfall of individuals who are eager to create new products in the pursuit of profit. Second, there is no deficit of problems that any new firm will face. Some of those difficulties come with the territory, as well should be the case. Furthermore, there are people like Igor who look for ways to steal the property of others, and while one can lament such a state of the world, the firms that survive are those that find ways to combat the theft and serve their customers at the same time.

But perhaps the biggest—and most unfortunate—lesson of *The PayPal Wars* is that entrepreneurship in America is increasingly threatened by what can only be called a class of parasites. At least one can outwit an Igor or create a better and more responsive product than a competitor. However, to deal with regulators, attorneys, and other government officials bent on legally extorting money, none of the aforementioned skills are helpful. The Eliot Spitzers of the world are not interested in someone building and selling a better mousetrap; they are only interested in how they can gain control over the mousetrap maker's money.

One hopes that readers of *The PayPal Wars* come to the conclusion that entrepreneurial geniuses are alive and well in this country and that we should be encouraging them to put their many talents to work creating products for the rest of us. Unfortunately, the present state of U.S. law and regulation is incompatible with such genius. It is to our own loss and sorrow that this state of affairs continues to dominate our lives and benefits only the parasites among us. R

Houses of Cards

Reviewed by Timothy J. Brennan

PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING
By David Evans and Richard Schmalensee,
380 pages; Cambridge, Mass.: MIT Press, 2005

A SURE-FIRE CLUE THAT A pre-1985 movie is out of date is not the cars, the slang, or even the fashion (although those bad 1970s haircuts can be a giveaway). No, the real giveaway is when the plot hinges on the inability of a character to get to a pay phone. Moviegoers not yet old enough to drink would find it either inexplicable or laughably ancient that the character does not just pull out his or her cell phone.

If purchasing played as big a part in movie plots as communicating, an increasingly compelling indicator of datedness would be writing a check or paying cash. The revolutionary transformation of the medium of exchange to encoded electronically transmitted data after a "2,500 plus year reign" of physical money is the setting for David Evans and Richard Schmalensee's *Paying with Plastic*. This accessible and informative book is part economic history, part business strategy, and part competition policy, reflecting the authors' extensive backgrounds in industrial organization and work on behalf of Visa in antitrust proceedings.

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The roles of structure and marketing are prominent and enlightening features. Forces driving standardization might suggest that differentiation and other business strategies would be irrelevant. The authors counter that impression in presenting numerous choices, including whether to operate as a joint venture, stand-alone issuer, or franchisor; how much to focus on charge, credit, signature and PIN debit, or smart cards; how much transaction processing to outsource; choosing between finance charges, annual fees, transaction charges, and "free" services bundled with checking accounts; whether to target high-end customers or aim for a more universal service; and, notably, how much exclusivity to adopt. An indication of the importance of those dimensions is that cards are used differently in different countries because of differences in geography (distance of transactions), technology (e.g., sophistication of telecommunications networks), and policy (e.g., a history of taxpayer subsidies of check-clearing costs and continuing subsidies for creating cash in the United States).

When it comes to policy, Evans and Schmalensee touch on claims that cards lead consumers to incur excessive debt, and that merchants accept cards only to take business from other merchants without commensurate social gains. They convincingly refute those criticisms, as they could be leveled against any quality improvement that stimulates demand. They also dismiss, albeit less satisfyingly, claims that interest rates on credit cards do not follow changes in underlying interest rates.

COMPETITION Befitting the authors' expertise and experience, the central policy questions in the book involve competition among banks and among card providers affecting the costs of transactions. To assess these, consider how a typical plastic transaction works between you and a merchant. The merchant contracts with a bank known as an "acquirer." The acquirer's primary task is to obtain permission and payment from your bank, known as the card "issuer." The card company, e.g., Visa, mediates the communications and transfers between member issuers and acquirers. Visa gets permission from your issuer and charges your account. The acquirer posts the money to the merchant, less a "discount" charged by the acquirer for its services.

In the middle of this is the "interchange fee," around 1.7 percent of the cost of a transaction, set by Visa and paid by acquirers to issuers. Acquirers take the interchange fee as given in setting their discounts when they compete for merchant accounts; they typically add on about 0.3 percent, resulting in discounts of about 2 percent subtracted from the merchant's revenues. Issuing banks, competing for indi-

vidual clients, take revenues from the interchange fees as given in deciding how much, if at all, to charge in annual or per-transaction fees. (For integrated acquirer-issuers, notably American Express, there is no explicit interchange fee.) The authors portray the interchange fee as revenue-neutral, deciding only the extent to which the costs of transactions fall on merchants or buyers, with a higher fee shifting costs to the merchants.

Despite the potential for differentiation through pricing and marketing, two effects drive this sector toward monopoly. The first is two-sided network externalities. The demand of buyers for a particular card, and for banks to issue that card, depends on how many merchants accept the card. Conversely, a merchant's willingness to take a card depends on how many buyers are likely to have and use it. In this electronic era, a Visa or MasterCard decal is virtually equivalent to saying "we take money." Successful entry is difficult, requiring extensive "seeding," i.e., giving away large volumes of cards to build up a clientele that would attract merchants (e.g., Discover cards growing out of the Sears charge card list) and willingness to offer liability limits on unauthorized charges.

The network externalities depend primarily on the numbers of buyers and merchants who take cards. At the transaction level, a different factor drives collective price setting. Were issuers to set interchange fees independently, the cost of a card transaction would be customer specific, either requiring transaction-specific discounts or allowing individual issuers to set enormous interchange fees. Standardized interchange fees prevent potential collapse or costly transaction-specific pricing. As the authors mention, this is not dissimilar to the rationale for collective setting of blanket license fees by ASCAP and BMI for the rights to broadcast copyrighted songs, and has suffered the same accusations of essentially being price-fixing.

Evans and Schmalensee portray the interchange fee as a nonprofit vehicle for member banks to cooperate to provide this necessary service, with the banks competing on all other dimensions. The authors call this arrangement "co-opetitition," providing further evidence that business schools should be kept as far from the English language as possible. More substantively, a claim that a venture of profit-maximizing banks is "nonprofit" is inherently no more credible than the old Fugs album title, "It Crawled into My Hand, Honest."

A collectively set interchange fee may have no adverse effects simply because profits above the cost of providing transaction services would be competed away by the acquirers and issuers. However, the interchange market is not obviously zero-sum. If merchants cannot differentiate between cash and card transactions in setting prices, or if issuers cannot set negative prices for providing card service, higher card fees will be passed on to all transactions, not just those with credit. In effect, the interchange fee could become akin to a privately collected sales tax. On the issuer side, to be competitively neutral, the profits from interchange fees would have to be returned to consumers in the form of transaction-specific rebates, perhaps explaining the growth in frequent-flyer mile awards and, in the case of Discover, monetary rebates.

DUALITY U.S. courts have allowed collective interchange fee setting; in some other countries, the interchange fee is allowed but regulated. However, the major U.S. antitrust action on charge cards has centered on "duality" (banks belonging to both MasterCard and Visa) and exclusivity (rules prohibiting Visa and MasterCard members from issuing cards by anyone else, e.g., American Express). The authors report that duality has been confusing to both sides. Visa originally opposed it, arguing that its member banks would be more likely to promote Visa if not also issuing other cards. But later, after Visa became the most commonly carried card, it litigated to keep duality. The Justice Department has vacillated from doubting its competitive harm in the 1970s to bringing an antitrust case against it in 2001.

On one hand, duality seems to subvert competition between Visa and MasterCard, particularly when constituted as joint ventures with virtually identical sets of members. On the other hand, duality allows banks to compete with each other by offering both Visa and MasterCard. Perhaps the biggest mystery of duality, in light of the two-sided network effects, is why we even have both Visa and MasterCard when virtually every merchant accepts both. In the few instances in which Evans and Schmalensee find competition between them by differentiation to some degree, they grant the possibility that a single collective is exploiting the two brand names it controls.

EXCLUSIVITY The 2001 antitrust case brought by the Justice Department also included an objection to exclusivity. As Evans and Schmalensee suggest, there is something of a contradiction in finding it anticompetitive both that banks carry Visa and MasterCard and that they refuse to carry others. One can reconcile the cases by resisting the authors' admonitions not to analogize card operations to other forms of organization, and to view issuers as outlets for the distribution of cards. The issue ought not be whether exclusivity (or duality) is intrinsically good or bad, but how much of the bank-level issuer market is covered by the exclusive contracts from any particular card.

From that perspective, it might promote competition to restrict the share of the issuer (bank) market covered in an exclusive manner by any particular card. For example, Visa and MasterCard could be allowed to have exclusive contracts with some subset of the issuers, but no more so than would raise concerns were that subset to merge its card-related operations. A first defense against a case seeking a restriction of that sort would be that the issuer market is easy to enter, i.e., that one could operate a bank without issuing Visa and MasterCard. If such entry is difficult, it plays into a second line of defense—that the two-sided externalities make Visa and MasterCard natural monopolies. Removing exclusivity is likely to be procompetitive only if other credit providers can survive. This illustrates a generic problem with monopolization cases: exclusion is likely to be less, not more, harmful, the stronger is the prior monopoly of the alleged excluder.

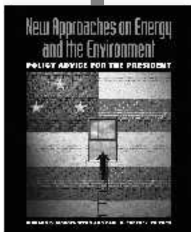
Prior to the publication of *Paying with Plastic,* the trial court ruled in favor of Visa and MasterCard in allowing duality, but in favor of the Justice Department in ending exclusivity. Subsequent to publication, the Supreme Court turned down requests for review. Evans and Schmalensee suggest that those legal defeats for the "co-opetitives" leave Visa and MasterCard vulnera-

ble to competition from automated teller machine networks and other electronic fund transfer technologies, despite also claiming in Visa's defense that American Express had been able to get banks to switch their card accounts to its brand.

CONCLUSION Sometimes, Evans and Schmalensee's closeness to one side of the case leads to giving the other side, and sometimes their own, short shrift. For example, they state that the court ruled for the Justice Department on exclusivity without explaining why it rejected Visa's arguments. Sometimes judges simply get the economics wrong, but it would be useful to know what, if any, aspect of Visa's case the trial court found wanting. The authors also only sketch what should have been a more detailed, ASCAP-like explanation for standardized interchange fees. Perhaps such an explanation did not fit the two-sided network externality mold or violated the admonition against applying lessons from other sectors to the card business. Evans and Schmalensee do provide a list of sectors featuring (occasionally exaggerated) two-sided network externalities, but their claims of a unique "organic nature of the co-opetitives" sound too much like the defensiveness shown by too many businesses in asserting that they are the exception to the antitrust rules.

In addition, the audience for this book is not obvious. Economists are going to wish for more detailed models and a more complete review of, and comparison with, prior research. An appendix that did not detract from the reader-friendly presentation, yet established formal propositions on the neutrality of interchange fees, would have been useful. Antitrust lawyers will miss detailed legal analyses of the central cases with references and comparisons to related litigation on monopolization and collectives. The general business audience may be disappointed by the book's near complete lack of discussion of security. Antitrust junkies (e.g., me) will enjoy the authors' stories, but for most people these days, the leading concerns about electronic payment (following the recent hacking into 40 million cardholder records) is "identity theft," a term nowhere to be found in the index. Still, those interested in competition policy and systems of payment will find much of value in *Paying with Plastic*, and it is likely to be widely adopted as a supplemental course in economics and business programs on money and marketing.

At number 42 in the American Film Institute's recent list of top 100 movie quotes is "Plastics," the one-word career advice given to Benjamin Braddock in *The Graduate*. Little did the filmmakers know how true that advice would become in defining how we live our commercial lives. *Paying with Plastic* excels as a review of how plastic-encoded electrons have displaced cash and checks, description of how the system operates physically and institutionally, and prognosticator of innovative challenges facing Visa and MasterCard. That it might have provided more detail on the economics of competition should be balanced against not just those accomplishments but also the enjoyment readers can find in working through the edifying puzzles remaining in this crucial and fascinating sector. R



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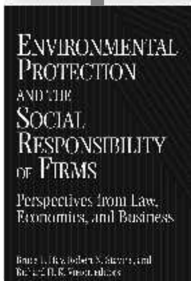

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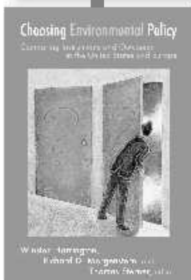

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