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THE NINTH ANNUAL ABRAHAM L. POMERANTZ LECTURE

THE INVESTOR CONFIDENCE GAME*

Lynn A. Stout†

Confidence *(n) 1: faith, trust*
WEBSTER'S NEW COLLEGIATE DICTIONARY (1980)

I have a nest egg. At least, I believe I have a nest egg. I believe this because each quarter, I receive statements in the mail that assert that I own shares in several corporations and that these shares have value. I do not know where or how these statements were generated, nor do I know who created them or through whose hands they have passed. I have never seen the stock certificates my financial statements assure me I own,

† Professor of Law, University of California at Los Angeles School of Law. An earlier version of this essay was given as a speech on April 25, 2002, at the Brooklyn Law School; I would like to thank those in attendance for their helpful comments and questions. I am also indebted to Stephen Bainbridge, Stuart Banner, Steve Choi, Tamar Frankel, Bill Klein, Lynn Lopucki, Martin Mayer, Douglas Olin, Frank Partnoy, Norman Poser and Roberta Romano for their insights and suggestions.

much less the corporate assets that underlie those stock certificates and give them value. I have never met the corporate officers and directors who are supposed to protect those assets and manage them on my behalf. In fact, for all I know my investments do not exist, and the statements I receive are created by a rogue broker on his personal computer. (If this scenario seems unrealistic, recall the Lehman Brothers broker who recently bilked investors of $125 million using just such a strategy.)[1]

Nevertheless, despite my lack of hard evidence or personal knowledge, I believe I have a nest egg. What's more, I rely on my belief in making daily decisions. I go out to dinner, the opera and the ball game, spending money now because I believe my nest egg will provide for my retirement in the future. This is an act of faith. It is an act of trust. It is an act of investor confidence.

My thesis is that my investing behavior is not unusual. To the contrary, many investors behave as I do. What's more, we should be grateful they do. Investor trust provides the foundation on which the American securities market has been built. Without investor trust, our market would be a thin shadow of its present self. Suspicious and distrustful investors would refuse to exchange their hard-earned cash for such abstract and intangible goods as corporate securities. Instead, they would put their savings into tangible assets like gold or real estate, or under their mattresses.

The importance of investor trust to the success of securities markets is, of course, something that many experienced policymakers and businesspeople have always recognized. Recent events, however, have highlighted the significance of investor trust in a fashion we have not seen since the 1930s. Over the last year, the American investor has been drowned in a seemingly relentless flood of announcements of accounting frauds and other irregularities at some of the nation's largest corporations.[2] In the wake of these scandals (and the stock price declines accompanying them), there has been much talk among regulators and business leaders of the importance of maintaining investor confidence in the market.

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[1] *See* Charles Gasparino & Susanne Craig, *Fugitive Stock Broker Is In Custody, Gruttadauria Turns Himself In*, WALL ST. J., Feb. 11, 2002, at C1.

[2] *See infra* text and notes 16-20, 32 (describing scandals at Enron, WorldCom, Xerox, Global Crossing and others).

Many commentators have also expressed fear that confidence is eroding.[3]

Yet, the phenomenon of investor confidence has received remarkably little detailed investigation by the academics who study the markets.[4] I would like to use the occasion of the Ninth Annual Abraham L. Pomerantz Lecture to begin to fill that gap. Recent events have underscored the importance of understanding the nature of investor confidence. In particular, they have highlighted the importance of understanding how investor confidence may be cultivated—and how it may be destroyed.

I. TWO MODELS OF INVESTOR BEHAVIOR

I begin with a basic question: why do investors invest? The answer seems obvious enough on first inspection. Investors invest because they expect to make money. But now one must confront another question that is quite a bit more difficult to answer. Why do investors believe they will make money by purchasing corporate securities? Why don't they believe, instead, that if they purchase corporate securities their money will be stolen or squandered by unscrupulous corporate

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[3] *See, e.g.*, Nanette Byrnes, *Five Ways to Avoid More Enrons*, BUS. WK., Feb. 18, 2002, at 36 (quoting CEO of Bethlehem Steel Corp. that "capitalism depends on investor confidence" and "that confidence has been brought into question"); Daniel Kadlec, *Eight Remedies*, TIME, June 17, 2002, at 51 (noting that "[t]he deepening erosion of investor trust" has moved the New York Stock Exchange to propose governance reforms); Mary Ellen Lloyd, *Questioning the Books: Krispy Kreme Takes Steps to Increase Investor Confidence*, WALL ST. J., Mar. 8, 2002, at A4 (describing how CEO of Krispy Kreme Doughnuts Inc. has begun governance reforms to reinforce investor confidence following the Enron scandal); Burton G. Malkiel, *The Market Can Police Itself*, WALL ST. J., June 28, 2002, at A10 (stating opinion of leading economist that "[i]nvesting is an act of faith. . . . There is no doubt that this faith has been shattered and is urgently in need of repair"); *Getting Investors to Trust Again*, BUS. WK., Mar. 4, 2002, at 120 (opining that "to restore investor trust, corporate executives, regulators, and legislators should act fast" and that "if Corporate America fails to reform itself quickly, investors could go on an all-out strike against stocks"); *The Tyco Market*, WALL ST. J., June 4, 2002, at A20 (suggesting in an editorial by a leading financial newspaper that "[a]nyone who still doubts that markets operate on trust might want to inspect yesterday's carnage on Wall Street").

President George W. Bush has recently added his voice to the swelling chorus. *See* Jeanne Cummings, *Bush to Seek Tougher Penalties In Assault on Corporate Fraud*, WALL ST. J., July 9, 2002, at A1 (quoting the President that "the free enterprise system . . . requires trust. We've had some destroy the trust of the American people, and we need to do something about it.").

[4] Frank Partnoy, *Why Markets Crash and What Law Can Do About It*, 61 U. PITT. L. REV. 741, 764 (2000) (noting that "trust plays a key role in the formation and function of capital markets" but "trust is an important consideration not often recognized by those considering the role of law in financial markets").

directors, larcenous executives, and dishonest brokers, investment advisors and mutual fund managers?

A. *The Rational Expectations Investor*

Implicit in most academic discussions of securities policy lies a standard answer to this question. Like legal scholars everywhere, legal scholars who specialize in securities regulation have been strongly influenced over the past two decades by the "law and economics" school of analysis. The law and economics school, in turn, relies on a model of investor behavior that I will call the "rational expectations" investor model.[5] Another apt appellation might be the "sophisticated" investor model.

According to the rational expectations model, investors behave like members of the species *homo economicus*: they are cool, calculating and purely self-interested actors. What's more—and this second point is critical to understanding the rational expectations approach—the rational expectations investor assumes that *other* participants in the market, including corporate managers and securities professionals like brokers and mutual fund managers, are *also* cool, calculating and purely self-interested actors. A rational expectations investor accordingly approaches the business of investing as she would approach a chess game. She assumes that corporate insiders and securities professionals will steal her money if they can do so, just as she assumes that the other player in a chess game will take her queen if she leaves it exposed.

This means that a rational expectations investor will only be willing to plunk down her hard-earned dollars to buy stocks, bonds or mutual fund shares if she is presented with evidence sufficient to persuade her that corporate insiders and securities professionals face external constraints adequate to discourage them from stealing and shirking, and external rewards sufficient to give them incentive to run their firms and their clients' portfolios well and profitably. To return to the chess analogy, the rational expectations investor will not move

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[5] I borrow the phrase "rational expectations" from game theory, a branch of economic analysis in which the *homo economicus* model has reached its zenith. *See generally* Sanford J. Grossman, *An Introduction to the Theory of Rational Expectations Under Assymetric Information*, 48 REV. ECON. STUD. 541 (1981) (discussing rational expectations theory); Lynn A. Stout, *Irrational Expectations*, 3 J. LEGAL THEORY 227, 228, 239-47 (1995) (same); Robert M. Townsend, *Market Anticipations, Rational Expectations, and Bayesian Analysis*, 19 INT'L ECON. REV. 481 (1987) (same).

her queen to an open space on the board until she is sure the other player can't take it. Rational expectations investors do not invest on faith. They take nothing for granted. Rather, they must be provided with evidence that they are adequately protected before they will part with their money. Absent such evidence, they prefer to bury their savings in a coffee can in the backyard.

The rational expectations investor model has two important implications. The first is that investors value securities accurately. They will only pay a high price for a particular security if the evidence demonstrates that it is, in fact, a quality investment, with a relatively high expected return or a relatively low level of expected risk. If the available information suggests that the firm is doing poorly—or if the information is inadequate for investors to determine if the firm is doing well—rational expectations investors refuse to pay a high price for the firm's securities, and indeed may refuse to buy them at all. The end result is an "efficient" stock market in which the prices of corporate securities accurately reflect their fundamental values.

Economists, finance theorists and securities scholars have, of course, paid an enormous amount of attention to the notion that the market rationally values securities.[6] Indeed one might suggest, with only the tip of the tongue in one's cheek, that academic publications arguing for and against market efficiency have contributed significantly to global deforestation. Rather than add to this problem, I focus on the second important implication of the rational expectations investor model, which has received far less attention than the first. This is the implication that *rational expectations investors do not need mandatory antifraud rules to protect them from losing their investments.*

To understand this argument, recall that rational expectations investors not only behave rationally and selfishly themselves, but also expect *others* to behave rationally and selfishly. This means that rational expectations investors presume that corporate insiders and securities professionals will not hesitate to lie, cheat or steal whenever they can get

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[6] For general discussions of the concept of market efficiency and the debate surrounding it, see BURTON G. MALKIEL, A RANDOM WALK DOWN WALL STREET: THE BEST INVESTMENT ADVICE FOR THE NEW CENTURY 199-274 (1999); and RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 349-77 (6th ed. 2000).

away with it. They recognize that, by putting their money into the stock market, they expose themselves to the risk that it will be squandered by negligent directors who manage companies poorly, stolen by dishonest executives who loot their firms or pilfered by unscrupulous brokers who drain their clients' accounts. As a result, a rational expectations investor demands that the legal system effectively constrain corporate opportunism.[7] If the legal system does not—if it allows directors to be negligent, managers to be disloyal and brokers to be dishonest—rational expectations investors are the first to recognize this and to remove their money from harm's way by refusing to invest.

The notion that rational expectations investors recognize when they are exposed to the risk of fraud and can protect themselves by refusing to invest has had a tremendous influence on contemporary securities regulation scholarship. It has become standard operating procedure for theorists to argue that inadequate legal protection for investors does not primarily hurt investors.[8] Instead, they argue that it harms *issuers*—companies and businesses that would like to raise capital by selling stocks and bonds to the public. Inadequate antifraud rules supposedly harm companies because when investors cannot distinguish good, honest, well-run companies from poorly-managed or dishonest firms (so-called "lemons"), they refuse to pay a decent price for the securities of either. Thus, solid firms cannot get investors to buy their stocks and

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[7] The phrase "legal system" includes both the constraints of criminal law and those of contract law.

[8] The idea that inadequate antifraud rules harm sellers traces back to George Akerlof's Nobel-prize winning work on so-called "markets for lemons." *See* George Akerlof, *The Market for "Lemons": Qualitative Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488, 494-99 (1970) (arguing that when buyers cannot distinguish high-quality goods from low-quality goods or "lemons," they will refuse to pay high prices, high-quality merchandise will be withdrawn from the market, and the market will come to be dominated by lemons). It is a standard practice among securities scholars to make parallel arguments regarding the securities markets. *See, e.g.*, Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 673-74 (1984) (using lemons argument in the context of securities markets); Paul G. Mahoney, *The Exchange As Regulator*, 83 VA. L. REV. 1453, 1457-59 (1997) (same); Adam C. Pritchard, *Markets As Monitors: A Proposal to Replace Class Actions With Exchanges As Securities Fraud Enforcers*, 85 VA. L. REV. 925, 939 (1999) (same); Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L.J. 2359, 2362-64 (1998) (same). A variation is the argument that, even if there are unsophisticated investors in the market, they will be protected to the extent that they rely upon more sophisticated institutional investors to make their investment choices and to set prices in an efficient market. *See* Stephen J. Choi & Andrew T. Guzman, *Portable Reciprocity: Rethinking the International Reach of Securities Regulation*, 71 S. CAL. L. REV. 903, 942 (1998).

bonds because they cannot distinguish themselves, in investors' minds, from confidence schemes and scam artists.[9]

An instructive example of this sort of argument can be found in an article recently published by Professor Roberta Romano in the *Yale Law Journal*.[10] Professor Romano offers a proposal for (as she puts it) "empowering investors." However, the way in which she suggests we empower investors is one I suspect many investors would view with little enthusiasm. This is because the heart of Professor Romano's argument is her recommendation that we change federal securities law to allow corporations that sell stocks and bonds to investors in the United States to elect not to be regulated by U.S. securities law, but instead by the laws of other nations or states—including nations and states that do not provide antifraud protection.

In other words, Professor Romano proposes that we empower investors by allowing corporations to opt out of U.S. antifraud rules and into legal systems that permit fraud. She suggests this, of course, because she does not believe investors actually will be defrauded. Rather, she argues that if corporations elect to be governed by legal regimes that lack effective antifraud rules, investors will refuse to purchase those firms' securities. As she puts it, "[i]t is silly to contend that investors will choose regimes that encourage fraud."[11]

This example illustrates how the argument that investors are sophisticated actors who know what legal protections they enjoy, and so are fully capable of protecting themselves from securities fraud by not investing, has shaped the course of contemporary theoretical discussions of securities policy. Indeed, it has become something of an intellectual gaffe for a serious securities scholar to suggest that investors might actually need some investor protection to prevent their exploitation. In the words of Judge (then Professor) Frank Easterbrook and Professor Daniel Fischel, both of the University of Chicago, many theoreticians view the argument that securities laws are necessary to protect unsophisticated

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[9] It should be noted that reducing the securities market to a "market for lemons" through inadequate antifraud protection indirectly harms investors to the extent they lose the opportunity to identify and invest in quality securities. They do not, however, suffer the primary harm of losing their investments to fraud.

[10] *See* Romano, *supra* note 8.

[11] *Id.* at 2368.

investors as being "as unsophisticated as the investors it is supposed to protect."[12]

Yet, as any law student who has taken a course in securities regulation knows, the Congress that passed the Securities Act of 1933[13] and the Securities Exchange Act of 1934[14] gave every appearance of taking the need for government-imposed investor protection quite seriously.[15] History taught them that investors could, in fact, be defrauded. Recent events are bringing home the same lesson. In the past year alone, American investors have lost hundreds of billions of dollars in market capitalization as reports of questionable accounting practices have surfaced at such firms as Enron,[16] Xerox,[17] Global Crossing[18] and (most recently) WorldCom.[19] Surely most of the investors who have lost money on these stocks have not dealt with their loss by calmly shrugging and saying, "oh, well, I knew that I might be defrauded when I bought that stock. That's why I paid such a low price for that lemon."

Instead, the American investor appears to have been caught flat-footed. She was unprepared for the prospect of widespread financial fraud. She did not expect her corporate managers to lie, cheat or steal. Now that she suspects many of them have, she feels anxious. She feels distrustful. She feels—

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[12] Easterbrook & Fischel, *supra* note 8, at 694. Although Easterbrook and Fischel were speaking about mandatory disclosure rules when they made this remark, in their discussion of antifraud rules in the same article, they also emphasized investors' supposed abilities to protect themselves by refusing to buy. *See id.* at 676.

[13] 15 U.S.C. § 77a (2000).

[14] 15 U.S.C. § 78a.

[15] *See, e.g.*, 15 U.S.C. § 77j(c) (authorizing the Securities and Exchange Commission to require issuers to provide in their prospectuses such information as is necessary "for the protection of investors"); 15 U.S.C. § 78j(a)(1) (authorizing the Securities and Exchange Commission to prescribe such antifraud rules "as necessary or appropriate . . . for the protection of investors").

[16] *See* John R. Emshwiller et al., *Enron Slashes Profits Since 1997 by 20%*, WALL ST. J., Nov. 9, 2001, at A3; John A. Byrne et al., *Enron & Beyond*, BUS. WK., Feb. 25, 2002, at 118.

[17] James Bandler & John Hechinger, *SEC Says Xerox Mislead Investors By Manipulating Its Earnings*, WALL ST. J., Apr. 12, 2002, at A3.

[18] Dennis K. Berman & Deborah Solomon, *Optical Illusion? Accounting Questions Swirl Around Pioneer in the Telecom World*, WALL ST. J., Feb. 13, 2002, at A1.

[19] Michael Schroeder, *SEC Files Civil Suit Against WorldCom: Agency Moves Quickly After Company Disclosures*, WALL ST. J., June 27, 2002, at A3. *See also* David Wessel, *Why the Bad Guys of the Boardroom Emerged En Masse*, WALL ST. J., June 20, 2002, at A1, A6 (presenting table of recent cases of alleged accounting fraud that lists, among others, Adelphia, CMS Energy, Computer Associates, Dynegy, Halliburton, Kmart, Microstrategy and Tyco International).

as the cover of *Business Week* magazine recently trumpeted—betrayed.[20]

B. *The Trusting Investor*

The notion that an investor might feel "betrayed" suggests an alternative model of investor behavior that differs substantially from the rational expectations model of the law and economics school. I call this alternative the model of the unsophisticated investor—or, as I prefer to refer to her, the *trusting* investor.[21]

Before I develop this idea further, I would like to explore what I mean when I use the phrase "trusting investor." When I contrast the trusting investor with the rational expectations investor, I am not suggesting that trusting investors are irrational in the lay sense of that word. Rather, I am suggesting that trusting investors do not behave as if they had what an economist would call "rational expectations."

Rational expectations analysis assumes that people not only behave in a purely self-interested fashion, but also expect *others* always to behave in a purely self-interested fashion. This assumption reflects rational expectations' roots in game theory, where people are presumed to be interested only in winning the game without regard to consequences for others. Similarly, rational expectations investors expect others to opportunistically exploit them whenever possible. As a result, rational expectations investors are forward-looking. Before they are willing to stick their necks out, they seek to understand their opponents' constraints, and to calculate whether those constraints are sufficient to deter their opponents from exploiting them. Rational expectations

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[20] *The Betrayed Investor*, BUS. WK., Feb. 25, 2002 (cover).

[21] I am using the word "trust" here to describe behavior with three characteristics. First, trust involves at least two actors: the actor who trusts, and the actor who is trusted. Second, trust requires the trusting actor to intentionally make herself vulnerable to the trusted actor, in circumstances where the trusted actor could benefit from taking advantage of the trusting actor's vulnerability. Third, trust requires the trusting actor to make herself vulnerable because she believes that the trusted actor will behave trustworthily, even in the absence of evidence of external rewards and punishments sufficient to ensure this. *See generally* Margaret M. Blair & Lynn A. Stout, *Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law*, 149 U. PA. L. REV. 1735, 1745-53 (2001) (discussing nature and definition of trust). This formulation excludes what Oliver Williamson has dubbed "calculative trust," meaning trustworthy behavior driven by the fear of legal or market sanctions. *See* Oliver E. Williamson, *Calculativeness, Trust, and Economic Organization*, 36 J. L. & ECON. 453, 485-86 (1993) (discussing calculative trust).

investors accordingly protect themselves from exploitation by refusing to become vulnerable in the first place.

In contrast, a trusting investor is willing to believe that at least some people (and, as I discuss below, possibly some institutions) might be trustworthy. For example, if person *A* always has behaved cooperatively, the trusting investor is willing to entertain the notion that person *A* for some reason simply is inclined toward cooperation.[22] Trusting investors accordingly look to the past: if someone has behaved in a particular fashion before, trusting investors assume that person will continue to behave similarly in the future, even if they don't fully understand what drives the behavior. (Economists sometimes describe this sort of backward-looking analysis as "adaptive expectations," to distinguish it from rational expectations.)[23] Trusting investors, unlike rational expectations investors, are willing to make themselves vulnerable to persons (or possibly institutions) that have behaved cooperatively in the past, because they view past behavior as prima facie evidence those persons or institutions will continue to behave cooperatively in the future. As a result, trusting investors can be betrayed and defrauded—at least once.

I have come to believe that many if not most of the individuals who invest in the American stock market more closely resemble the trusting model of investor behavior than the rational expectations model. Consider the substantial anecdotal evidence of investor trust. I suspect I am not the only person who believes she has a nest egg simply because she has a file full of papers. Indeed, I have found that when I ask otherwise-sensible people where they have invested their savings, they often confess to a rather stunning degree of ignorance about such matters. I invite you to repeat this experiment among your own friends.

Such observations alone should raise the suspicion that many investors are trusting investors. But if further evidence is needed, one can find it by simply thinking more carefully about the nature of the modern securities market. The importance of trust to the American securities market is proven by the very existence of the market. This is because a

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[22] A rational expectations investor would view a past history of cooperative behavior as a potential trick.

[23] *See, e.g.*, ROBERT A. SHILLER, IRRATIONAL EXUBERANCE 60-61 (2000) (discussing adaptive expectations); Grossman, *supra* note 5, at 543 (same).

rational expectations investor—a distrustful investor who expects corporate managers and securities professionals to lie, cheat, steal and shirk, and demands proof that they are somehow constrained from doing this before investing—would never buy corporate securities in the first place.

Distrustful investors would avoid a public securities market because, for most, the information costs associated with participating in such a market are so enormous as to discourage even trying. Imagine you are a rational expectations investor who is contemplating acquiring a modest but diversified portfolio of corporate equities through a broker. Consider the many people in a position to steal from you. These include the broker, the broker's administrative assistant and almost anyone else in the broker's firm. A rational expectations investor would want to make sure that each and every one of these presumably larcenous individuals had external incentives sufficient to deter them from stealing and sufficient to encourage them to do a good job. This means knowing not only securities law and the rules of broker-dealer regulation (as well as the procedures and punishments involved in applying such laws and regulations) but also the details of the individuals' and firm's incentive contracts and compliance systems.

And what about the companies in which the broker invests the rational expectations investor's portfolio? Each of these companies is also, presumably, filled with opportunistic actors—directors, officers and employees—who would not hesitate to shirk or commit fraud if they thought the likely gains outweighed the likely costs. Before the rational expectations investor would place her money in the hands of such individuals, she would again need assurance that law and contract adequately constrain them from shirking and stealing.

Some rational expectations investors might conclude that this sort of omniscience is not needed to invest because auditing firms, the SEC and more sophisticated investors will monitor securities professionals and corporate insiders. This sort of argument, however, only moves the problem back a step. Why would a rational expectations investor assume that third parties have the proper incentives and constraints to do the job, if she does not actually research the third parties' incentives and constraints?[24] For example, why should a

[24] For example, rogue broker Frank Gruttadauria was in theory overseen by

rational expectations investor assume that the managing partner of an accounting firm has the desire or the ability to uncover fraud, that the relevant bureaucrat at the SEC has the means and the will to punish it, or that a mutual fund portfolio manager has adequate incentive to monitor against it?

A rational expectations investor accordingly would have to do an enormous amount of homework to safely conclude simply that her money was unlikely to be stolen—and determining whether one's money is likely to be stolen is only the first step in evaluating an investment. Even after a rational expectations investor concludes that she is unlikely to be cheated or lied to, she must still figure out whether the security at issue is a good investment. To do this, she must understand not only all the rights and privileges that accompany the security, but also the firm that issues it, including the firm's governance structure, the quality of its products and employees, the nature of the markets in which it competes, its relationships with customers and suppliers, its regulatory environment and its financial health.[25] A distrustful, rational expectations investor accordingly would work herself into exhaustion gathering, verifying and analyzing information before she could feel secure enough to hold a diversified portfolio of publicly-traded equities. Burying her money in a coffee can in the backyard may be the better investment option.

It might be argued that rational expectations investors do not actually need to gather and analyze all this information, because an "efficient" stock market does the job for them.[26] This argument, however, presumes that rational expectations investors believe the stock market is not only "informationally" efficient (prices respond rapidly to new information) but also "fundamental value" efficient (prices respond not only quickly, but accurately, so that they reflect the best possible estimates of fundamental value).[27] This is a dubious presumption, given

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a compliance officer, but that officer had a very poor incentive structure; Gruttadauria was the head of the brokerage office, and the compliance officer's boss. *See supra* text accompanying note 1 (discussing Gruttadauria case); *Boards Need To Examine Auditors*, FUND DIRECTIONS, Mar. 2002, at 6 (noting that the compliance officer for Gruttadauria's branch office reported to Gruttadauria himself).

[25] A graduate-level course on finance theory would also be of help.

[26] *See supra* text accompanying note 6 (discussing concept of market efficiency).

[27] *See* Lynn A. Stout, *Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation*, 81 VA. L. REV. 611, 646-50 (1995) (distinguishing informational from fundamental value efficiency and discussing how the empirical evidence favors the former); William K.S. Wang, *Some Arguments that*

that even prominent economists question the market's fundamental value efficiency.[28]

Thus it seems something of a miracle that the U.S. stock market, as we know it, even exists. Nearly 40% of all American adults choose to own stocks either directly or through mutual funds or self-directed retirement accounts.[29] What's more, half of these investors have portfolios with a value of $28,000 or less[30]—hardly enough to justify the sort of exhaustive research necessary to persuade rational expectations investors to invest. What then convinces these investors to risk their hard-earned money by buying corporate securities?

The answer is trust. American investors take it as a matter of faith that the brokers and mutual fund managers to whom they entrust their savings will use those funds to actually purchase securities on their behalf. They take it as a matter of faith that the corporations that issue securities really exist, have real assets and make real profits. Because they have faith, American investors buy trillions of dollars of corporate equities each year, even when they are not quite sure what it is that they are buying.[31] (One could not ask for a more instructive example than Enron. Before its sudden and shocking collapse, the firm was routinely cited as one of the best-run and most innovative companies in America, even though neither the shareholders who owned its stock nor the analysts who followed its progress really understood how Enron made its money.)[32]

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the Stock Market Is Not Efficient, 19 U.C. DAVIS L. REV. 341, 344-49 (1986) (same).

[28] *Compare* BREALEY & MYERS, *supra* note 6, at 368-77 (generally supporting fundamental value efficiency while noting many puzzling anomalies), *and* MALKIEL, *supra* note 6, at 270 (concluding after extensive review of evidence that "pricing irregularities and predictable patterns may well exist," while doubting whether investors can exploit patterns through short term trading), *with* Fischer Black, *Noise*, 41 J. FIN. 529, 532-33 (1986) (arguing against fundamental value efficiency); SHILLER, *supra* note 23 (same); ANDREI SHLEIFER, INEFFICIENT MARKETS: AN INTRODUCTION TO BEHAVIORAL FINANCE (2000) (same).

The trusting investor model itself offers an explanation for fundamental value inefficiency. *See infra* text accompanying notes 58-61.

[29] N.Y.S.E., NYSE FACTBOOK FOR THE YEAR 2000, 2001, at 55-66 [hereinafter NYSE FACTBOOK] (noting that 43.6% of the adult population, or eighty-five million individuals, own stocks directly or through mutual funds, retirement savings accounts and pension plans, and that seventy-six million own their stocks directly or through mutual funds and self-directed retirement accounts).

[30] *Id.* at 57 (noting median portfolio of $28,000).

[31] *See id.* at 9 (noting that more than $11 trillion in corporate equities were traded on the NYSE in 2000).

[32] *See* Nanette Byrnes, *Paying for the Sins of Enron*, BUS. WK., Feb. 11, 2002, at 35 (observing that "[a]s Enron imploded, investors realized they had never really

This is not to say that American investors necessarily believe that corporate insiders and securities professionals are honest and dependable individuals. (Although I personally am willing to entertain the possibility that most are honest and dependable, I concede recent events have raised doubts.) The average investor may not trust all or even any of the individual actors who together comprise the institution we call "the market." At a minimum, however, American investors must believe that somehow the legal system constrains these individuals sufficiently that the benefits of investing outweigh the risks. They must believe that the regulators are regulating, and the watchdogs are watching. In other words, investors may not need to trust *people* before they are willing to give up their hard-earned dollars. But they must at least trust *the system*.

II. THE PHENOMENON OF INVESTOR CONFIDENCE

Why and under what circumstances do investors trust the system? I devote the balance of my discussion to the phenomenon of investor confidence, and to exploring some of the factors that may encourage and discourage it. My comments are preliminary; in speculating about the nature and limits of investor trust, I intend more to suggest avenues for future research than to provide conclusive answers. Nevertheless, given the importance of investor confidence to modern financial markets, the time has come for us to pay more attention to the available evidence on when and under what circumstances people tend to trust others.

As it turns out, there is a large body of both theoretical and empirical evidence on trust. The phenomenon of trust has been the subject of innumerable case studies, behavioral experiments and theoretical discussions.[33] I do not intend to

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understood how the company made its money"); Rebecca Smith & John Emshiller, *Trading Places: Fancy Finances Were Key to Enron's Success, and Now to Its Distress*, WALL ST. J., Nov. 8, 2001, at A1 (noting that Enron "routinely made published lists of the most-admired and innovative companies in America" although it had a "seemingly impenetrable financial structure"); Susanne Craig & Jonthan Weil, *Most Analysts Remain Plugged In to Enron*, WALL ST. J., Oct. 26, 2001, at C1 ("Wall Street researchers have been overwhelmingly—critics would say blindly—enthusiastic about Enron, even as they acknowledge not always understanding the complex financial transactions that accounted for its soaring profits"); Ron Scherer & David R. Francis, *Lessons of Enron: How Could No One Have Seen It?*, CHRISTIAN SCI. MONITOR, Jan. 16, 2002, at 1 ("In Enron's case, the analysts who covered the firm may not have fully understood what was going on. . . . [A]nalysts started to trust the company instead of maintaining a skeptical attitude.").

[33] The literature on trust is vast and varied. For a few examples, see Blair &

survey that body of literature in its entirety here. Rather, I will leap ahead to the punch line—or, more accurately, to two punch lines. First, *trust exists*. In a wide variety of circumstances, people appear willing to trust (i.e., make themselves vulnerable to) others who could benefit from violating their trust. Of course, most of us know from introspection that we are willing to trust friends and family members in this fashion. But subjects in behavioral experiments also regularly demonstrate a willingness to trust strangers, groups of strangers and even nonhuman actors, like computers.[34]

Second, this willingness to trust depends heavily on something experimenters call "history effects."[35] In lay terms, the decision whether or not to trust another actor is strongly influenced by one's past experience with that actor or with similar actors in similar situations. This means that, given a history of favorable experience, people will accept a rather high degree of vulnerability to others, apparently believing it safe to trust. Conversely, a history of unfavorable experience makes one distrustful and unwilling to make oneself vulnerable. Put simply, *trust is learned.*

That people trust, and that trust is influenced by history, is something most of us already know quite well from personal experience. Nevertheless, it can be useful to test the validity of one's experience against more formal evidence. Thus, let us consider a type of common experimental game that provides strong evidence in support of these two points (that trust exists, and that it depends in part on experience). This experimental game is often called the "Give Something" game. To hint at its relevance to the topic of investor confidence, I

Stout, *supra* note 21; Peter Brann & Margaret Foddy, *Trust and the Consumption of a Deteriorating Common Resource*, 31 J. CONFLICT RESOL. 615 (1987); TRUST IN SOCIETY (Karen S. Cook ed., 2001); TRUST: MAKING AND BREAKING COOPERATIVE RELATIONS (Diego Gambetta ed., 1988); FRANCIS FUKUYAMA, TRUST: THE SOCIAL VIRTUES AND THE CREATION OF PROSPERITY (Free Press Paperbacks 1996) (1995) ; Michael W. Macy & John Skvoretz, *The Evolution of Trust and Cooperation Between Strangers: A Computational Model*, 63 AM. SOC. REV. 638 (1998); Lawrence E. Mitchell, *Fairness and Trust in Corporate Law*, 43 DUKE L.J. 425 (1993); Carol M. Rose, *Trust in the Mirror of Betrayal*, 75 B.U. L. REV. 531, 540-41 (1995); and Julian B. Rotter, *Interpersonal Trust, Trustworthiness, and Gullibility*, 35 AM. PSYCHOLOGIST (1980); *see also* authorities on institutional trust cited *infra* note 54.

[34] *See infra* text accompanying notes 39-41, 50-52, 62-64.

[35] *See infra* text accompanying notes 46-48.

note that the "Give Something" game is also sometimes called the "Investment" game.[36]

A. *Trust Behavior in the "Give Something" Game*

In a typical Give Something game, a group of experimental subjects is brought together and each subject is given an amount of money. The subjects then are told they can choose to invest some or all of their money into a common pool. In the parlance of experimental gaming, this is called "cooperating." Alternatively, the subjects are told they can choose to keep all their money for themselves. Experimenters call this "defecting." Finally, the subjects are also told that any money contributed to the pool will be multiplied by some factor and redistributed to the players.[37] But—here's the catch—the players are told that the money will be redistributed in equal shares to all, whether or not they chose to contribute in the first place.[38]

Such rules place the players in a Give Something game in a difficult dilemma. Consider a simple example of a game played by four players, each of whom is given $10 and told that

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[36] *See, e.g.*, Sara Kiesler et al., *A Prisoner's Dilemma Experiment on Cooperation with People and Human-Like Computers*, 70 J. PERSONALITY & SOC. PSYCHOL. 47, 51 (1996) (describing game in which subjects were asked to interact with an "investment partner"); S.S. Komorita et al., *The Effects of Reward Structure and Reciprocity in Social Dilemmas*, 29 J. EXPERIMENTAL SOC. PSYCHOL. 252 (1993) (describing experiment in which subjects were instructed that they could choose to "invest" in common pool).

More broadly, the Give Something/Investment Game is an example of an important type of experimental game known among social scientists as a "social dilemma." *See generally* RESOLVING SOCIAL DILEMMAS: DYNAMIC, STRUCTURAL, AND INTERGROUP ASPECTS (Margaret Foddy et al. eds., 1999). Researchers have shown an enduring fascination for social dilemmas, and over the past half-century have published the results of hundreds of experiments reporting consistent results. *See generally* Robyn M. Dawes, *Social Dilemmas*, 31 ANN. REV. PSYCH. 169 (1980) [hereinafter *Social Dilemmas*] (reviewing studies); Robyn M. Dawes & Richard H. Thaler, *Cooperation*, 2 J. ECON. PERSP. 187 (1988) [hereinafter *Cooperation*] (summarizing studies); Robyn M. Dawes et al., *Cooperation for the Benefit of Us—Not Me, or My Conscience*, *in* BEYOND SELF-INTEREST 97 (Jane J. Mansbridge ed., 1990) (summarizing studies); David Sally, *Conversation and Cooperation in Social Dilemmas: A Meta-Analysis of Experiments from 1958 to 1992*, 7 RATIONALITY & SOC'Y 58 (1995) (summarizing over 100 studies done between 1958 and 1992).

[37] In order to create a social dilemma, this multiplication factor must be greater than one but less than the total number of players in the game.

[38] As this example illustrates, a social dilemma game like the Give Something game presents its subjects with a payoff function similar to the famed Prisoner's Dilemma of game theory. As in the case of the Prisoner's Dilemma, each subject must choose to either cooperate or defect. As in the case of the Prisoner's Dilemma, each individual player always serves her self-interest best by defecting, yet if all defect, all end up worse off than if they had cooperated.

any contributions to the common pool will be doubled and redistributed equally. Suppose a player in this game expects her three fellow players to defect. In this case she is best off keeping her $10 for herself. After all, if she contributes her $10 to the pool it will be doubled to $20, but then shared among all four players, so she only gets $5 back. Alternatively, suppose she expects her three fellows to cooperate. She is still best off if she defects: she not only keeps her initial $10, but also gets an extra $15, one-quarter of the $60 common pool created from the others' contributions.

Rational and selfish actors asked to play a Give Something game accordingly should always choose to defect. This is an unfortunate choice, however, because if all defect, all receive the minimum possible payout and walk away with only $10. In contrast, if all the players cooperate by contributing their $10, the common pool will total $40. Once this amount is doubled and redistributed, each player will walk away with $20. Thus, cooperation, not defection, results in the maximum payout.

Nevertheless, a purely selfish person asked to play the Give Something game should always choose to defect, because no matter what the other players do, she always maximizes her own returns by defecting. The Give Something game consequently illustrates how the rational pursuit of self interest sometimes can ensure the worst possible outcome. Given this unfortunate result, it is perhaps cause for celebration that numerous studies have established conclusively that real people do not behave like purely self-interested actors when they play the Give Something game. Hundreds of these types of experiments have been reported in the literature,[39] and researchers have found that as a general rule, the average subject contributes approximately 50% of her initial stake to the common pool.[40] This is true even when experimenters go to great lengths to ensure that the subjects in the game understand that there is no possible external reward for contributing.[41]

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[39] *See* sources cited *supra* note 36.

[40] *See* Dawes & Thaler, *Cooperation*, *supra* note 36, at 189 (noting that subjects on average contribute 40% to 60% in social dilemma games); Sally, *supra* note 36, at 62 (reporting average cooperation rate of 50% in a statistical study of more than 100 published social dilemma experiments).

[41] For example, many social dilemma experiments have been structured so that the players played anonymously, assured that their choice of strategy would remain unknown to both the experimenter and their fellow players. Sally, *supra* note

Why does this happen? The question of why people cooperate in these sorts of social dilemma games is a complex one that scholars have addressed at length elsewhere.[42] For present purposes, I would like to focus on one aspect of the experimental evidence that may have special relevance for the question of investor confidence. This is the finding that *subjects are far more likely to contribute to the common pool in a Give Something game when they believe that their fellow players will also contribute.*[43] Conversely, if a player expects her fellow players to defect, studies show that she is far less likely to contribute herself.

This finding suggests that experimental subjects tend to view the Give Something game as a situation that calls for *reciprocal trust.*[44] If a player thinks her fellow players are going to selfishly defect, she will defect herself. But if a player thinks her fellow players are going to "play fair" and contribute, she too will contribute. This latter sort of thinking requires trust, because a player who believes that her fellow players will contribute in the Give Something game must believe this despite that fact that—as a rational player would know quite well—the external incentives reward defection. In other words, the behavior of experimental subjects in social dilemma games suggests that we do not always assume other people will

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36, at 65, 67. This structure eliminates any possibility that the other players or the experimenter will take vengeance on the defecting player. Similarly, in a number of studies the experimenters "debriefed" their subjects after the game was over to determine if they understood the structure of the game, and found that the subjects did indeed recognize that cooperation reduced their own payoffs. *Id.* at 70.

[42] *See, e.g.*, Blair & Stout, *supra* note 21, at 1764-80 (discussing explanations for cooperation); Kelly S. Bouas & S.S. Komorita, *Group Discussion and Cooperation in Social Dilemmas*, 22 PERSONALITY & SOC. PSYCHOL. BULL. 1144, 1145-46 (same); Toshio Yamagishi, *The Structural Goal/Expectations Theory of Cooperation in Social Dilemmas*, 3 ADVANCES IN GROUP PROCESSES 51, 66-74 (1986) (same).

[43] Yamagishi, *supra* note 42, at 64-65 ("Expectations about other members' behavior is one of the most important individual factors affecting members' decisions in social dilemmas."); Dawes, *Social Dilemmas*, *supra* note 36, at 187 (same); *see, e.g.*, Craig D. Parks et al., *Trust and Reactions to Messages of Intent in a Social Dilemma*, 40 J. CONFLICT RESOL. 143 (1996).

[44] *See, e.g.*, S.S. Komorita et al., *Reciprocity and the Induction of Cooperation in Social Dilemmas*, 62 J. PERSONALITY & SOC. PSYCHOL. 607, 608 ("There is considerable evidence that the reciprocity norm is relevant and important in a social dilemma situation. . . . The norm . . . prescribes that we should help those who have helped us in the past and retaliate against those who have injured us . . . ."); Parks et al., *supra* note 43, at 135 (discussing role of trust and expected reciprocation in triggering cooperation in social dilemmas); Yamagishi, *supra* note 42, at 64-65 (discussing experimental findings regarding expectations about others' behavior and noting that "expectations for other members' cooperation is related to trust in other members").

behave in a purely selfish fashion. Sometimes we are prepared to assume that even total strangers may behave cooperatively. Sometimes we are prepared to trust—at least until our experience suggests our trust has been misplaced.[45]

Like trust generally, trust behavior in experimental games is subject to history effects.[46] One of the most important findings in the experimental literature on trust is that if a subject believes that a particular person has proven untrustworthy in the past, she is far less likely to make herself vulnerable to that person in the future. For example, when researchers ask subjects to play social dilemma games repeatedly with each other, they often find that cooperation rates decline over time when cooperating players learn that other players are defecting, because the cooperating players begin to defect themselves.[47] Conversely, when an experimental subject interacts with the same partner repeatedly and that partner proves trustworthy, the subject will become willing to make herself even more vulnerable than she was in initial rounds.[48]

Such results suggest that the primary difference between the behavior of real subjects playing experimental games, and the behavior of the hypothetical "rational expectations" game player, is that real people behave as if they believe in *character*. Put differently, real people behave as if they believe that, for some reason, some players refrain from opportunistic behavior even when they could safely indulge in it. Thus, unlike the rational expectations player, the trusting player does not have to investigate others' external incentives before she is willing to believe that they might behave in a responsible fashion. She does not have to assure herself that every individual she deals with is constrained (as a game theorist would put it) by "the shadow of the future"—the fear of future rewards and punishments.[49]

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[45] The trusting behavior subjects display in experimental games is by no means the same thing as gullibility. Subjects in the Give Something game make themselves vulnerable when they donate to the common pool, in the apparent belief that at least some of their fellow players also will donate. But this belief is not naive: the studies also demonstrate that many players do in fact donate.

[46] *See* Thomas Gautschi, *History Effects in Social Dilemma Situations*, 12 RATIONALITY & SOC'Y 131 (2000).

[47] *See* Blair & Stout, *supra* note 21, at 1767, 1776.

[48] *See id.* at 1774-75.

[49] *See* ROBERT AXELROD, THE EVOLUTION OF COOPERATION 12-13, 126-27 (1984) (discussing "shadow of the future" as source of cooperation in social dilemmas).

Instead, the trusting player looks to "the shadow of the past." If a person has proven cooperative in a particular situation in the past, the trusting player will expect that person to be cooperative in similar situations in the future, without bothering to think too much about why this might be so. Conversely, if a person has proven untrustworthy in the past, the trusting player will assume that person has an untrustworthy "character"—again, without bothering to think too hard about the matter.

B. *Trust Behavior in the Stock Market*

One might object that it is a bit of a stretch to think we can learn something about the behavior of investors who interact with a complex system like the stock market from the behavior observed when people interact with other people in an experimental game. Perhaps it is. As noted earlier, it is possible that many investors do not assume that corporate managers and securities professionals are generally honorable, trustworthy, law-abiding sorts. To the contrary, they may assume that many if not most of the human actors who comprise the market are scoundrels. These investors invest not because they trust managers, brokers and investment advisors, but because they rely on the legal system (including legally enforceable contracts) to discourage managers, brokers and investment advisors from behaving like the scoundrels that they are.

Nevertheless, there is reason to believe that such reliance may still reflect a form of trust.[50] Significant evidence

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[50] Public securities markets resemble social dilemma games because to get the optimal result, two types of players (investors on one hand, and corporate managers and securities professionals on the other) must cooperate with and make themselves vulnerable to each other. Investors make themselves vulnerable by providing the money needed to capitalize corporate enterprise. Market professionals make themselves vulnerable by investing their careers in acquiring the skills necessary to manage large firms and large portfolios. If investors were to "defect" by withdrawing their capital from the market en masse, corporate managers and securities professionals would be left worse off, just as investors would be left worse off if corporate managers and securities professionals were to "defect" by committing fraud en masse.

Social dilemma games do not perfectly replicate the problems raised by stock markets, however, because the incentives of corporate managers and the incentives of investors differ to some extent. For managers, the stock market looks like a prisoner's dilemma. No matter what investors do (cooperate by investing funds or defect by refusing to invest), a rational and purely selfish manager is always better off if she defrauds the investor whenever this can be done. From the investor's perspective, the stock market presents incentives that resemble the incentives of the game theorists

supports the idea that people can trust not only their fellow human beings, but also nonhuman actors—including systems and institutions. As an example of this phenomenon, consider another interesting finding from the Give Something game experiments: a substantial proportion of human subjects will contribute when asked to play the Give Something game not with other people, but with a computer.[51] (Interestingly, the highest cooperation rates are observed when subjects interact with a computer that looks like a computer. Cooperation rates decline when subjects are asked to deal with a computer that presents a video image of a human face and speaks with a synthesized voice, perhaps because they perceive a computer that "tries to look human" as less trustworthy than a straightforward, old-fashioned, beige-box sort of computer.)[52]

Such findings suggest that the human tendency toward trust is so strong and universal that many people are prepared to believe not only in the innate character or trustworthiness of other people, but also in the innate character or trustworthiness of *things*—including, perhaps, such abstract things as "the law" or "the stock market."[53] Many social scientists who study trust subscribe to this notion and believe that people can place their trust in complex systems and institutions just as they can place their trust in other people. Thus, there is a rather extensive literature on institutional trust.[54]

The possibility that many investors invest because they "trust the market" (a phrase that incorporates both personal trust in a particular broker or investment advisor, and

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call "stag hunt." In the stag hunt game, both players do best if both cooperate, but if one defects, the optimal strategy for the other is also to defect. *See generally* Paul G. Mahoney & Chris W. Sanchirico, *Competing Norms and Social Evolution: Is the Fittest Norm Efficient?* 149 U. PA. L. REV. 2027, 2041-42 (2001) (describing stag hunt game). Similarly, if investors believe managers are trustworthy, the best payoffs come from trusting. If investors believe managers are untrustworthy and will defect, the next-best strategy is to refuse to invest.

Although an extensive body of literature documents how experimental subjects behave in social dilemmas, I am unaware of any parallel empirical literature on human behavior in games that present incentives similar to those of the stag hunt game.

[51] Kiesler et al., *supra* note 36, at 60.

[52] *Id.*

[53] *See id.* at 63 (concluding that "[h]uman social behavior . . . does not depend on interaction with people or even categorization in a human group").

[54] *See, e.g.*, RODERICK M. KRAMER & TOM R. TYLER, TRUST IN ORGANIZATIONS (1996); TRUST WITHIN AND BETWEEN ORGANIZATIONS (Christel Lane & Reinhard Bachmann eds., 1998); PIOTR SZTOMPKA, TRUST: A SOCIOLOGICAL THEORY 43-44 (1999) (discussing "trust directed at institutions and organizations").

institutional trust in the legal system or the market) offers to explain a number of otherwise-puzzling market anomalies that are difficult if not impossible to reconcile with the rational expectations model. An intriguing example can be found in a recent study that concludes that as investors age, they tend to put a larger portion of their investment portfolios into corporate equities.[55] This behavior is inconsistent with both rational expectations and with conventional investment wisdom, which recommends that investors put more of their portfolios into stocks when they are young[56] and reduce risk by weighting their portfolios more toward debt or cash as they approach retirement.[57]

That investor interest in equities increases with age is easily explained, however, under the trusting investor model. The trust model suggests that young investors may buy modest amounts of stock even if they know almost nothing about the formal rights they enjoy at law or the business in which they are investing. They buy because they are willing to "have a go" at trusting, just as many experimental subjects are willing to have a go at trusting their fellow players in the Give Something game. If their investment is successful—if their trust proves justified—they become willing to trust more, and still more again, as they gain experience with the market. Thus, the trust model of investor behavior predicts that investors who enjoy generous returns from their stock investments when they are in their thirties and forties will naturally become more trusting (and more willing to invest a larger portion of their portfolios in equities) in their fifties and sixties. This scenario may describe the investing experience and behavior of many members of the "Baby Boom" generation, who enjoyed great luck with their stock investments during the 1980s and as a result became even more eager to buy stocks in the boom market of the 1990s.

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[55] John Ameriks & Stephen P. Zledes, How Do Household Portfolio Shares Vary With Age? 43 (Dec. 3, 2001) (draft on file with the author) (reporting results of study finding that equity portfolio shares increase strongly with age).

[56] If they dare to own stocks at all, something I have already argued is often inconsistent with rational expectations. *See supra* text accompanying notes 23-25.

[57] *See* Ameriks & Zledes, *supra* note 55, at 1, 3-11 (discussing how basic portfolio theory predicts that the portion of wealth held in equities should remain constant, while professional advisors suggest decreasing equity ownership with age); BURTON G. MALKIEL, A RANDOM WALK DOWN WALL STREET 368 (4th ed. 1995) (noting that "as investors age, they should start cutting back on riskier investments").

In addition to explaining why investors favor equities more as they grow older, the trusting investor model also is consistent with recent work done by finance theorists on the otherwise-puzzling market phenomena of over-volatility and speculative bubbles. Robert Shiller has concluded from a long-term study of the market that stock prices vary more than can possibly be explained by changes in underlying corporate earnings; in economic terms, the market appears far more volatile than efficient market theory predicts.[58] The Crash of 1987, and the remarkable run-up in stock prices (especially technology stocks) in the late 1990s, also have lead many informed observers to conclude the stock market is susceptible to speculative manias and price bubbles.[59] Such phenomena undermine the notion of an efficient market driven by investors' rational expectations, because they suggest that stock prices frequently move far more than can possibly be explained by changes in underlying stock values.

The trusting investor model offers an explanation for such movements. This is because the trust model suggests that many of the individuals who invest in corporate securities are not paying attention to fundamental values at all. Rather, these trusting investors are paying attention to *history*—to what they have come believe is the market's intrinsic "character." When stock prices trend upwards, trusting investors are prone to forego independent research and to assume that this "cooperative" institutional behavior will continue. Their assumption may endure long past the point where there is objective evidence to support their belief.

Recent history may offer an instructive example of this phenomenon. During the 1990s, stock price rises that originally reflected real increases in economic productivity became exaggerated as investors who watched corporate earnings rise became convinced this trend would continue, and poured more and more money into equities. This influx of capital drove stock prices still higher, stirring even more investor interest, attracting even more money, driving prices still higher, until P/E ratios—the ratio between the price investors were willing to pay for stocks, and actual firm earnings—reached stratospheric levels.[60] Thus, investor trust may have produced a

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[58] SHILLER, *supra* note 23.

[59] *See id.* at 63 (describing April 1999 poll in which 72% of professional money managers opined that the stock market was in a speculative bubble).

[60] *Id.* at 8 fig. 1.2, Price-Earnings Ratio, 1881-2000 (figure showing average

period of market history that, especially with the benefit of hindsight, looks suspiciously like a classic example of a speculative bubble.[61]

Trust may also explain why and how such a bubble can burst. When prices fall—for almost any reason—the trust model of investor behavior suggests that many investors may begin to change their beliefs about the markets' "cooperative" character. Faced with stock losses instead of gains, formerly trusting investors lose faith. Having lost faith, they may refuse to invest in stocks again—even when the underlying economic problem has been solved and stocks are once more an attractive investment. The result may be a painful, protracted, yet fundamentally unwarranted bear market.

C. *Trusting Investors and Securities Policy*

This last point is important, because it hints at some of the important policy implications that flow from the trusting investor model. One of the more obvious of these implications is that *trusting investors matter*. Rather than dismiss the "unsophisticated investor" as the weak animal that must sadly but necessarily be culled out of the investing herd in order to improve the species, perhaps we should pay close attention to his care and feeding. It may be the trusting investor who has made it possible for the United States to develop a multi-trillion dollar public securities market in which corporations can annually raise hundreds of billions of dollars of new capital.

This is not to say that there are not some investors, especially institutional investors, who come close to conforming to the rational expectations model of behavior. But there is good reason to suspect that trusting investors may be the heart and soul of the modern market. Individual investors, most of whom hold rather small portfolios, own nearly 50% of all U.S. corporate equities.[62] Although institutions like mutual funds, pension funds and insurance companies own most of the rest,

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price-earnings ratio of S&P Composite Stock Index increasing from around 7-to-1 in early 1980s, to nearly 45-to-1 in 2000).

[61] *See* E.S. Browning, *S&P 500 Follows Nasdaq to Multiyear Low*, WALL ST. J., July 3, 2002, at C1 (reporting that S&P 500 index has hit four-year low and Nasdaq composite five-year low, even as economy seems to be in recovery).

[62] *See* NYSE FACTBOOK, *supra* note 29, at 57, 61 (noting that median portfolio value of individual investors is $28,000, mean is $149,000, and that U.S. institutions own about 50% of U.S. corporate equities).

often these institutions' investment decisions also are influenced by individuals' views of the market: it makes little difference if a mutual fund manager thinks her equity fund a good investment, if individual investors do not agree.

Thus, to maintain a large and thriving public securities market, perhaps we must pay attention to the needs of the trusting investor. And one of the first things the trusting investor needs, quite bluntly, is at least some degree of government-imposed investor protection.[63] This is because trusting investors—unlike rational expectations investors—can be fooled. They are willing to take a chance on unknown individuals and opaque institutions. Even when they do not know much about the securities they are buying or the extent to which the legal system protects them, trusting investors may be willing to "cooperate" with the market or their broker by investing at least a modest amount in the market, just as many experimental subjects in social dilemma games choose to cooperate with their fellow participants and see if they cooperate back.

A market with a significant presence of trusting investors accordingly is a market where a con artist or swindler, if left unsupervised, can make quite a nice living. Of course, trust is subject to history effects—a con artist who becomes known as a con artist will eventually run out of unsuspecting sheep to shear. But in the meantime, he may have collected quite a bit of wool. Abraham Lincoln is credited with observing that "you may fool all the people some of the time; you can even fool some of the people all the time; but you can't fool all of the people all the time."[64] I would like to add a corollary to Lincoln's Law—you can indeed fool some of the

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[63] To describe the problem in the language of law and economics, the trusting model of investor behavior suggests that securities markets are best regulated through tort rules rather than through property rules. *See generally* Guido Calabresi & Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972). As a general rule, property rules accompanied by freedom of contract allocate resources most efficiently when transaction costs are low. When transaction costs are high, however, tort rules (which substitute judicially-imposed damages for the price that would be set in a free market) may be better. In the case of securities markets, high transaction costs take the form of the immense amount of information needed to protect oneself from fraud through contract. *See supra* text accompanying notes 23-25.

[64] BARTLETT'S FAMILIAR QUOTATIONS 524 (Emily Morison Beck ed., 15th ed. 1980). In the same quote, Lincoln also remarked on the importance of history effects to trust: "If you once forfeit the confidence of your fellow citizens, you can never regain their respect and esteem." *Id.*

people some of the time. For the boiler-room operator or Ponzi schemer, that is enough to pay the rent.

Indeed, under the right circumstances, fooling some of the people some of the time may be quite a bit more than enough to pay the rent. This is because history effects work both ways. An investor who loses his shirt may eventually become as suspicious as the hypothetical rational expectations investor of economic theory. An investor who experiences a period of investment success, however, is likely to become more and more trusting, and more and more vulnerable. When stock market prices rise for exogenous reasons—say, a decrease in commodities prices or the discovery of new productivity-enhancing technologies—trusting investors will be inclined to put more money into the market on the assumption that they can expect similar price increases into the indefinite future, without bothering to investigate whether this is, in fact, likely to be so. The resulting association between increased investment returns and increased investor trust may explain why bull markets tend to be accompanied by an increase in the incidence of securities fraud.[65]

This sort of history-driven increase in investor confidence (that is, willingness to become vulnerable by investing money) may not pose a problem when our mandatory disclosure and antifraud systems work as they should, so that frauds of various forms are regularly detected and punished, and the problem of securities fraud is kept within reasonable boundaries.[66] But what happens if the regulatory system changes? In particular, what happens if we weaken our investor protection laws, leaving investors exposed to greater risk of fraud?

Because the trusting investor looks more to the past than to the future, she is likely to overlook such threats until it is too late. Only after the horse has left does she recognize that the barn door has been open for some time. In fact, trusting

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[65] *See* E.S. Browning, *Abreast of the Market: Burst Bubbles Often Expose Cooked Books and Trigger SEC Probes, Bankruptcy Filings*, WALL ST. J., Feb. 11, 2002, at C1; *see also* Wessel, *supra* note 19.

[66] I use the word "may" here in recognition of the possibility that one can have too much investor trust: if positive past returns lead investors to raise their estimates of stock values, leading to even more positive returns, leading to even higher prices, the phenomenon of investor trust could produce a speculative bubble in which prices depart dramatically from rational estimates of value, with resulting distortions in the allocation of social resources. That is a problem to be discussed another day, however.

investors may have already lost quite a few horses in this fashion.

As an academic who studies corporate law and securities regulation, I am keenly aware that over the past two decades we have seen a variety of changes in the securities markets, in the securities laws and in our regulatory technology that have made it much easier for corporate managers and securities professionals to commit fraud and escape punishment. The list is legion, but some prominent examples include (1) the Private Securities Litigation Reform Act of 1995, explicitly designed to make it more difficult for plaintiffs to bring securities fraud class actions in federal courts;[67] (2) the Securities Litigation Uniform Standards Act of 1998, intended to preclude plaintiffs from seeking solace in state courts by bringing their securities fraud class actions there;[68] (3) the development and refinement in the courts of a variety of doctrines, such as standing rules, limitations on aiding and abetting liability, damages limitations, the "bespeaks caution" doctrine and the "no fraud by hindsight doctrine," all of which make it easier for courts to dismiss securities fraud claims;[69] (4) the evolution of a standard practice among broker-dealers and other securities professionals of requiring clients to sign agreements that waive their rights to sue in court and require them to submit to arbitration before individuals widely perceived as sympathetic to the securities industry;[70] (5) the failure of accounting standards to keep pace with changes in the nature of modern business, including the increasing importance of intangible

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[67] Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737 (codified in scattered sections of 15 U.S.C.). *See generally* Symposium, *Securities Litigation: The Fundamental Issues*, 38 ARIZ. L. REV. 491 (1996) (discussing 1995 Act).

[68] Securities Litigation Uniform Standards Act of 1998, Pub. L. No. 105-353, 112 Stat. 3227 (codified in scattered sections of 15 U.S.C.). *See generally* Richard W. Painter, *Responding to a False Alarm: Federal Preemption of State Securities Fraud Causes of Action*, 84 CORNELL L. REV. 1 (1998) (discussing 1998 Act).

[69] Stephen M. Bainbridge & G. Mitu Gulati, *How Do Judges Maximize? (The Same Way Everybody Else Does—Boundedly) Rules of Thumb In Securities Fraud Opinions*, 51 EMORY L.J. 83, 118-33 (2002); Marc L. Steinberg, *Curtailing Investor Protection under the Securities Laws: Good for the Economy?*, 55 S.M.U. L. REV. 347, 350-51 (2002).

[70] *See* Janet E. Kerr, *The Arbitration of Securities Law Disputes After* Rodriguez *and the Impact on Investor Protection*, 73 MARQ. L. REV. 217, 256 (1989) (discussing widespread practice of requiring arbitration); Stephen J. Ware, *Domain-Name Arbitration in the Arbitration Law Context: Consent to, and Fairness in, the UDRP*, 6 J. SMALL & EMERGING BUS. L. 129, 138-39 (2002) (discussing widespread perception of pro-broker bias in securities arbitrations).

assets and derivative contracts, with a resulting decline in the accuracy of firms' financial statements as measures of their financial health;[71] and (6) budgetary pressures at the SEC, where staffing levels have remained fixed for nearly a decade while caseloads have risen by 80%.[72]

These and other developments[73] in the law and the market have steadily eroded the legal protections enjoyed by investors. A rational expectations investor would hardly be surprised to find—indeed, would predict—that the end result of this erosion would be an increase in the incidence of securities fraud.[74] Given the ways in which we have weakened our regulatory system, perhaps we should be grateful that things have not gone even more poorly for the American investor during the past year. (Of course, there may be many more shoes left to drop.) My point, however, is that they have gone rather poorly, and that the American investor has suffered as a result. She has trusted, and her trust has been abused.

Let us hope that it has not been abused too much. A third and quite troubling lesson of the trusting investor model is that trust that is abused tends to disappear, with no reason to expect it to return quickly. As Mark Twain observed, a cat that has sat on a hot stove is not going to sit on the stove again, even when it is cold.[75] You can explain to the cat that the stove is cold until you are blue in the face—you can even disable the stove so it will never be hot again—but no self-respecting feline is going to go near it a second time. Similarly, history effects may make it difficult for even the most thorough and effective

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[71] *See Accountancy Used to Be Boring, If Only It Still Were*, ECONOMIST, May 18, 2002, at 19-20 (noting that "accounting rules . . . offer plenty of opportunity for manipulation" and that "[t]he growing use of derivatives and off-balance-sheet financing and the rising importance of intangible assets such as brands and goodwill have all posed challenges to traditional accounting, none of which has been resolved entirely satisfactorily"); Mike McNamee et al., *The Reluctant Reformer*, BUS. WK., Mar. 25, 2002, at 72 (noting "an alarming erosion in the honesty and reliability of financial information about companies").

[72] McNamee et al., *supra* note 71, at 75.

[73] For the reader interested in finding still more examples of how our investor protection laws have been weakened in recent years, see Steinberg, *supra* note 69, at 348-51.

[74] *See* Lynn A. Stout, *Type I Error, Type II Error, and the Private Securities Litigation Reform Act*, 38 ARIZ. L. REV. 711, 714-15 (1996) (arguing in 1996 that provisions of the 1995 Act diminishing investors' ability to sue for fraud might increase the incidence of frauds and eventually harm stock prices).

[75] MARK TWAIN, FOLLOWING THE EQUATOR 124 (1897) ("We should be careful to get out of an experience only the wisdom that is in it—and stop there; lest we be like the cat that sits down on a hot stove-lid. She will never sit down on a hot stove-lid again—and that is well; but also she will never sit down on a cold one any more.").

market reforms to entice trusting investors back into the securities market again, after they have been badly burned.

In other words, Professor Romano may be right—in the long run.[76] Trusting investors can learn to avoid putting their money into securities markets regulated by legal regimes that do a poor job of deterring fraud and so offer relatively low or even negative returns. Similarly, investors can learn to prefer other markets that give them better protection and better returns.

But in order for the learning process to work, the legal regime must remain stable. If the regime shifts and the rules of the game are changed, it may take some time before investors come to recognize the change and adjust their behavior accordingly. Indeed, given the "noisiness" of securities markets, the learning process may take years or even decades. As a result, we cannot expect investor confidence to stop and turn on a dime. Manipulating investor trust may be more like steering an oil tanker—to change direction, one must be prepared to wait a while before seeing any response to a turn of the wheel. Conversely, delaying corrective action until one is sure the tanker is headed for the rocks invites disaster.

Thus we had better be sure that our lawmakers and policymakers are steering our markets in the correct direction. In response to the recent wave of securities scandals, policymakers, the press and a number of business leaders have called for a range of regulatory reforms to shore up investor confidence before it becomes too badly eroded.[77] Unfortunately, as of this writing most of these proposals have stalled in the face of intense interest group lobbying, a divided Congress, and the indifference of an administration with a strong antiregulatory bias.[78]

The trusting investor model counsels against a cautious and delayed response. If we are going to take action, it is far better to do it too soon than too late. Despite Enron, WorldCom, etc., the American investor still seems to have some faith in the market. We cannot assume that faith will be unwavering. If we adopt a "wait and see" attitude and still more frauds develop,

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[76] Romano, *supra* note 8.

[77] *See* sources cited *supra* note 3.

[78] *See generally* Amy Borrus et al., *What Corporate Cleanup? As Washington Dithers, Financial Reform Is Going Nowhere Fast*, BUS. WK., June 17, 2002, at 26; Richard S. Dunham et al., *Reform Lite: In Scandal's Wake, the Government May Make Only Modest Changes*, BUS. WK., Apr. 1, 2002, at 30.

the damage may already be done. Investors will lose faith and prices will decline; this price decline will reinforce investors' loss of faith, leading to more price declines; and so on in a self-reinforcing downward spiral. The result may be a painful, protracted and unnecessary bear market.

History offers some alarming examples of just such bear markets. After the Crash of 1929, nominal stock prices did not reach similar levels until more than twenty years later, in 1954—despite the regulatory reforms imposed by Congress in the 1933 Securities Act and the Securities Exchange Act of 1934.[79] Similarly, following the bear market of the mid-1970s, nominal stock prices did not return to their 1973 high for a decade.[80] When these figures are adjusted to account for inflation, the recovery time in each case is even longer.[81]

I am not convinced such prolonged bear markets are especially bad for well-run companies. After all, even in the best of times, such firms tend to rely upon other sources of finance than public issues of securities (retained earnings play an especially important role here).[82] But I am convinced that prolonged and unjustified bear markets are bad for investors—especially those, like me, who are counting on their securities investments to help sustain their standard of living upon retirement.

CONCLUSION

Academic discussions of securities policy often assume that investors are hyperrational and distrustful actors who do not need the protections of the securities laws to avoid being defrauded. The time has come to recognize the limitations of this assumption and to consider as well the possibility and

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[79] *See* RICHARD J. STILLMAN, DOW JONES INDUSTRIAL AVERAGE: HISTORY AND ROLE IN INVESTMENT STRATEGY app. A, fig. A-6 (1986) (showing that Dow Jones Industrial Average, which peaked at 381 in September of 1929, did not reach similar level until November of 1954).

[80] *Id.* (showing that Dow Jones Industrial Average, which peaked at 1051 in January 1973, did not reach similar level until November of 1982).

[81] *See* SHILLER, *supra* note 23, at 9-10 (noting that the inflation-adjusted S&P Composite Index did not return to its September 1929 values until December of 1958, and that real stock prices that peaked in 1968 did not return to these levels until 1992).

[82] *See* BREALEY & MYERS, *supra* note 6, at 384 tbl. 14.1 (showing that internally generated funds provide the vast bulk of funds used by nonfinancial corporations); *see generally* Lynn A. Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH. L. REV. 613, 645-51 (1988) (discussing the unimportance of stock market prices to most firms' abilities to raise capital).

implications of investor trust. Experienced policymakers and businesspeople (and certainly experienced con artists) have long known that trust is a potent force in explaining and manipulating investor behavior. They are right. They are right to believe that investor confidence—meaning investor trust—is important to the market. They are right to think that trust has been imperiled by the recent slew of securities frauds and accounting scandals. Finally, they are right to call for swift and sure action to restore investor trust.