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Efficient Market Theory: Let the Punishment Fit the Crime*

Louis Lowenstein†

You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right.¹

Benjamin Graham

In the 1980s some things went right on Wall Street but much went wrong. The fallout is still being felt today. Prudential Securities, which for years boasted that "the most important thing we earn is your trust," now apologizes for having systematically duped many of the hundreds of thousands of investors who bought its limited partnership deals. Carl Icahn boasted of having bought TWA, but leaving none of his own money there, he succeeded only in leaving the flying public with twenty year-old aircraft and poor service. Banks and insurance companies bankrolled so many new buildings that we will not work off the excess until the end of the century, if then. As we close the books on the worst era in modern U.S. financial history, Prudential at least has the resources to make amends. Those victimized by others must often grasp at straws.

This is a good time for a post-mortem. It is not widely recognized, but scholars played an important role in the debacle, providing ingenious free-market theories to justify some of the worst excesses. One such concept, efficient market theory, contributed to the damage then and, in its various mutations, continues to do so today.

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† Simon H. Rifkind Professor of Finance & Law, Columbia University. This Article is based on an indictment handed up at Jerome Levy Institute, Bard College, October 7, 1993. My thanks to Ron Gilson, Bob Kuttner and, as always, Roger Lowenstein for helpful comments.

1. BENJAMIN GRAHAM, *THE INTELLIGENT INVESTOR* 287 (4th rev. ed. 1973).

Even if you are not a student of financial economics, the phrase "efficient market theory" sounds right. After all, the stock market *is* crudely efficient: markets set the minute-to-minute value of stocks, the spreads between bid and asked prices are very small, and commissions are as little as two cents a share.

Efficient Market Theory (EMT), however, posits something more radical. The principal version, and the one on which this indictment will focus, states that we can trust the pricing of stocks. Supposedly, competition among sophisticated investors enables the stock market to price stocks "accurately"—that is, in accordance with our best expectations of companies' long-term prospects. (The trading by nonprofessionals is said to be random and of no net effect.) Supposedly, too, all relevant publicly available information is analyzed by investors, and new data, such as earnings releases, are quickly noted, digested, and then reflected in the share prices.

In short, stock prices, while not perfect, are as perfect as can be. There are no better estimates of the fundamental value of a company and no systems for beating the market. A corollary is that the wisest of us can do no better than to buy the market as a whole; the rest of us can do far worse.

EMT rests on several quite controversial assumptions, the most striking of which is the terribly convenient but circular assumption that mispriced stocks cannot long exist because if they did, "smart money" investors/arbitrageurs would already have eliminated them. This when-all-else-fails assumption, so central to the theory, is also the source of the well-worn joke about two economists walking across the campus who spy what seems to be a twenty dollar bill. As the younger economist leans forward to examine it, her older colleague restrains her. "If it really were a twenty dollar bill," he says, "someone would already have picked it up."²

Given the assumption that patience and intelligence are of no consequence, even a super-investor like Warren Buffett should not be able, certainly not with any consistency, to find loose money lying on the table. In fact, it would be a waste of his time to look.

As one of the high priests of EMT recently wrote, with visible pride, the testing of the theory has itself become so voluminous as to be a "research industry," and a mature one at that.³ I do not intend to go over that

2. For an analysis of why the stock market is less likely than others to be efficient, see Louis Lowenstein, *Book Review: Is Speculation "The Essential Native Genius of the Stock Market"?*, 92 COLUM. L. REV. 232 (1992).

3. Eugene F. Fama, *Efficient Capital Markets: II*, 46 J. FIN. 1575, 1599, 1607 (1991).

voluminous, often dreary body of data. Much of it focuses on such trivialities as the January effect—small company stocks are said to do better in January—or how quickly the market responds to news of, say, a stock split or dividend increase. How much do we really care, for example, that the market reaches an equilibrium price one day after the announcement of a dividend change, unless we have somehow assumed—what is of course the critical issue—that the price was right to begin with? Because if it were not, whether it takes one day or six is irrelevant.

Instead, I want to look beyond the market and to sound a wider alarm.⁴ Like some computer virus, EMT, the notion of "trusting prices," has spread far beyond its origins as a scholarly study of the trading market. Having long ago left its academic chrysalis, EMT has not only contaminated issues and analyses in Wall Street, but also in executive offices on Main Street, that would not have seemed to have been at risk, and in ways that are poorly understood. Scholars might harbor reservations about some aspects of EMT, but with their encouragement (and never a word of reproof) much of America now drinks its market efficiency "straight up," taking EMT as much for granted as the light bulb in the ceiling or the air we breathe.

The defendant, EMT, is hereby indicted. The indictment is limited to four counts. EMT, we shall see, is guilty of:

- (1) providing the intellectual cover for the excesses in junk bonds and takeovers in the 1980s, ignoring the mounting evidence, *visible even then*, that important sectors of the economy and innocent bystanders were in jeopardy;
- (2) encouraging investors and executives to indulge the fantasy that they can "trust prices" to balance risk and reward and thereby save themselves the enormous bother of analyzing businesses;
- (3) aiding and abetting the efforts of the Business Roundtable and other interest groups to strip voting and other basic shareholder

4. There is a growing, typically younger, group of dissidents. See Robert J. Shiller, *Who's Minding the Store?*, in THE REPORT OF THE TWENTIETH CENTURY FUND TASK FORCE ON MARKET SPECULATION AND CORPORATE GOVERNANCE 27 (1992). The empirical studies of efficient market theory have been thoroughly reviewed elsewhere and from various points of view. See *id.*; see also MARSHALL E. BLUME & JEREMY J. SIEGEL, THE THEORY OF SECURITY PRICING AND MARKET STRUCTURE 14-27 (1992); RONALD J. GILSON & BERNARD S. BLACK, THE LAW AND FINANCE OF CORPORATE ACQUISITIONS (forthcoming 1995); ROBERT J. SHILLER, MARKET VOLATILITY (1989); Donald C. Langevoort, *Theories, Assumptions and Securities Regulation: Market Efficiency Revisited*, 140 U. PA. L. REV. 851 (1992).

- rights and have them treated as saleable bits of private property;
and
(4) justifying a theory of dividend policy that encourages wasteful corporate investment and expansion.

The result is that our financial markets have become increasingly desocialized, shuffling bits of paper and computer analytics in response to their own internalized signals, with too little regard for the real companies, workers and products that are the markets' reason for being.

Count 1: Promoting the "Market for Corporate Control"

For financial economists, the merger boom of the 1980s was the stuff of dreams. Since 1932, when Adolf Berle and Gardiner Means first described the separation of ownership and control in the modern, publicly-held corporation, observers had wrestled with the dilemma that corporate democracy did not work, that these dispersed shareholders had very limited power, and that corporate managers were able to avoid any serious oversight or discipline. Then at the beginning of the 1980s there blossomed a shiny new economic model, affectionately called the market for corporate control, which saw the emerging takeover boom as a natural selection device for replacing the poor performers.⁵ The model is an appealing one. Given an efficient stock market, of which few economists then had any doubt, poor managerial performance would drive down a company's stock price to the point where it would pay a more talented group to bid a substantial premium for control, fire the incumbents and run the business themselves. Indeed, in a market as efficient as the one in the model, there could be no other systematic reason for takeovers.

Glory be, the merchants of deals on Wall Street could scarcely believe their ears. Long accustomed to being vilified on Main Street, they were now being heralded all across the scholarly landscape—and by high government officials trained by scholars—as the avenging angels of economic revival. Academics, in turn, who had never before seen their theories played out on a trillion dollar scale, were quite prepared to testify that all of this would improve the efficiency of American industry.

5. See Lucian A. Bebchuk, *The Case for Facilitating Competing Tender Offers*, 95 HARV. L. REV. 1028 (1982). For an early and particularly uncritical defense of takeovers, see Frank H. Easterbrook & David R. Fischel, *The Proper Role of a Target's Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161 (1981).

In the hot summer of their triumph, scholars and their converts—none of them baptized more thoroughly than Ronald Reagan's Council of Economic Advisers⁶—ignored the perverse incentives and palpable imperfections that drove this market, eventually to wild excess. The story has been widely told in its several variations, but the basic system for takeovers and leveraged buyouts worked like this: Take a not-too-glamorous business, but one with decent prospects, and buy it with as much borrowed money as the banks will lend. As the market heated up, however, even these standards deteriorated. The investment by the new owners became hard to find, and under the pressure to make ever more deals, the prices became absurd. Structured with no room for a disappointment of any kind, these takeovers left many viable businesses—typically household names—and once-loyal workers and communities on the dole. The business casualties—the walking wounded as well as the outright failures—would fill many pages. Here are a few (see box):

<i>Real Casualties of Market Theory</i>	
National Gypsum	Texas Air International
Grand Union	Seaman's Furniture
Jim Walter Corp.	USG (Gypsum)
R.H. Macy	Southmark
Federated Department Stores	Trans World Airlines
Fruehauf	Interco
Lincoln Savings & Loan	Integrated Resources
West Point Pepperell	Southland
Harcourt Brace Jovanovich	SCI Holdings
Zale	Telemundo
Revco Drug	Ames Department Stores
Centrust Savings & Loan	Ohio Mattress
Carter Hawley Hale	Continental Airlines
Memorex/Telex	Kindercare

6. ECONOMIC REPORT OF THE PRESIDENT, H.R. DOC. No. 99-19, 99th Cong., 1st Sess. 199 (1985).

How did it happen? EMT provided the justification. In an efficient market, one in which the stock market could not undervalue corporate assets in any meaningful way, efficiency/productivity enhancement justifies takeovers. While this was somewhat obscured by euphemisms, such as that the takeover market is one in which managers "compete for the right to manage resources," the basic implication was that higher bidders can manage assets better and that the higher share price is the measure of the prospective improvement.

On a modest scale, hostile takeovers are a useful idea, but even in the eighties the gaps in the theory were evident:⁷

- If target company managements were not striving to do the best for *their* shareholders, how sure could one be that bidder managements were doing so for their own? (Indeed the history of the already failed conglomerate era should have raised doubts.)
- The extraordinary availability of borrowed money was soon allowing promotional buyers, having no operating experience and little resources of their own, to acquire major industrial/commercial enterprises.
- The tax gains generated by the substitution of debt for equity—the elimination of the corporate income tax—alone accounted for a substantial portion of the "value" being created in these buyouts.
- There were substantial numbers of bids for palpably well-managed targets, not the laggards assumed by the model.
- The premium prices being paid by bidders, averaging at times as much as eighty percent over the prevailing price in the market, should have raised concerns as to the likelihood of such consistently large efficiency gains.
- The unprecedented level of fees being earned by bankers and kindred promoters, which soon dwarfed everything else on Wall Street, suggested that efficiency gains may not have been the sole, or even primary, object of the game.

7. For a contemporaneous discussion, see Edward Herman and Louis Lowenstein, *The Efficiency Effects of Hostile Takeovers*, in *KNIGHTS, RAIDERS, AND TARGETS: THE IMPACT OF THE HOSTILE TAKEOVER* 211 (John C. Coffee et al. eds., 1988) (one of a group of papers delivered at a 1985 conference at Columbia).

Alas, EMT had blinded scholars, and others, too, to what was now painfully clear in the marketplace: the deals were not making sense—to anyone but the middlemen. All through the latter part of the 1980s, when the preponderance of takeovers was happening, the prices being paid for significant targets, *on average*, were over fourteen times earnings before interest and taxes. That amounted to a return of seven percent, even while the bidders were then paying on average ten to eleven percent for capital.⁸ The rule-of-thumb was ninety percent debt, ten percent equity. On a multi-billion dollar deal, the deficit can add up quickly.

Compared to stocks, the yardsticks for debt, such as the ratio of earnings to interest charges, are not very complex, there being many fewer variables. For AA-rated bonds, earnings before interest and taxes (EBIT) should cover interest charges six or more times over. (Since the bondholder will never get more than his interest coupon, his overriding concern is safety.) For "good" junk bonds the coverage may be no more than two times, leaving much less room for adversity. By the mid-eighties even this good junk had been driven from the market.

The damage has been long lasting. In financial terms, the loss was not just the high default rate, the failed savings and loans and other direct costs. As a recent Federal Reserve Bank of New York study has shown, there has been a continuing need for refinancings devoted less to real investments than to restoring shattered balance sheets.⁹ In human terms, it was a story of workers and middle managers who had long ago invested their careers in the various target companies of the day, but who, unlike senior management, could not protect themselves.

Neoclassical economists now concede that leveraged-buyout magnates like Robert Campeau, who sought control of many of the nation's department store groups, might have bid too high—that there is a hubris factor which produces a sort of winner's curse. But the concession is little more than an effort to control the damage to their prized theory. Campeau, like many another, could buy a major company, say, Allied Stores, investing no more of his own capital than necessary to pay the (not trivial, of course) fees of the bankers and lawyers. The actual purchase price, the only money still at risk,

8. BARRIE A. WIGMORE, *SECURITIES MARKETS IN THE 1980S* (forthcoming 1995); Barrie A. Wigmore, *The Decline in Credit Quality of New-Issue Junk Bonds*, *FIN. ANALYSIS J.*, Sept.-Oct. 1990, at 53, 54.

9. Eli M. Remolona et al., *Corporate Refinancing in the 1990s*, *FED. RESERVE BANK OF N.Y. Q. REV.*, Winter 1992-93, at 1.

came from a broad cross section of the banking and financial community here and abroad. It was the hubris of this far-flung institutional market, not just a handful of manic/depressives, that accounted for the excesses. Come to think of it, given their ability to control extraordinary amounts of institutional money with few constraints—First Boston, for example, chafing for fees, virtually threw capital at Campeau—the Campeaus of the day may have been the most rational players in the game.

Remarkably enough, there has not been a single serious effort by such defenders of EMT as Harvard financial economist Michael Jensen, Nobelist Merton Miller, or other traditional finance scholars to retrace their steps, to see how it was that excessive debt increased risk, instead of merely rearranging the risk as their models had forecast. The best I see, and it is really not very good at all, are concessions that mistakes were made, but we learn from our mistakes and are not likely to repeat those *particular* ones again.¹⁰ ("An efficient market, sir, is one in which we succumb to different illusions at different times.")

Count 2: Offering Booze to Perennial Drunks

Ever since Benjamin Graham and David Dodd,¹¹ and John Maynard Keynes wrote in the 1930s, we have known that the traders and other professionals on Wall Street by and large lack the temperament to invest money on a rational, long-term basis. Graham early on, others of us later on, preached the rewards of ignoring the stock market except when the manic/depressive behavior occasionally offered opportunities to buy or sell on an advantageous basis.

Preach as one might, Keynes knew from the beginning that it would be an uphill fight.¹² Given, he observed, the uncertainties affecting any business and its competition, Keynes concluded that there was not a sufficient basis for calculated mathematical projections. As business people (and stock pickers, too), we take the next best, much more comfortable course. We assume that the present state of the world—the economy, politics, war, drought, and whatever—represents a state of equilibrium that will continue

10. For a striking example of such denial, see Donald Chew, *Charles Ponzi's Disciple*, WALL ST. J., Aug. 12, 1993, at A10.

11. BENJAMIN GRAHAM & DAVID L. DODD, SECURITY ANALYSIS (1st ed. 1934).

12. JOHN M. KEYNES, THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY 152 (1st ed. 1936).

indefinitely into the future until something happens to disturb it. We assume, too, that stock market valuations (and other markets' as well) reflect everything there is to know about business realities and prospects, and that *they will only change as new information appears.*

EMT now offers up a sacramental blessing to those who would like to believe the Wall Street dogma: "Don't argue with the tape."

Far from approving of this myopia, Keynes was deeply concerned. The "social object of skilled investment," Keynes wrote, "should be to defeat the dark forces of time and ignorance which envelop our future."¹³ For us preachers, past and present, it is indeed discouraging to see today's scholars dignify, with complex algebraic formulas and computer run-offs, the notion that it is foolish to argue with the tape, that thinking is a waste. Certainly we should not pick stocks.

What, defendant says—yes, we permit a word for the defendant—has been the damage? First, it lies in the extraordinary growth of index funds. A fund manager, persuaded that stocks are as correctly priced as can be, saves herself the bother and buys the market as a whole, or an index such as the *Standard & Poor's 500*, as a proxy for the market. Indexers rely heavily on the history that stocks, on average and over time, have performed much better than, say, bonds. But theirs is a truncated view of history, one that at best ignores the proven importance of buying in when market values are at historically sustainable levels. Are the levels today sustainable? Sorry, the question is out of order, one that an EMT-indexer is sworn not to ask.

Indexing confounds the essential logic of a discriminating capitalism—that we move capital and assets to higher valued uses. We all know not to put all our eggs in one basket. But EMT goes far beyond the usual dictates of prudence. Quoting again John Maynard Keynes, who had an enviable investment record with several insurance company and Kings College funds:

To suppose that safety-first consists in having a small gamble in a large number of different directions . . . , as compared with a substantial stake in a company where one's information is adequate, strikes me as a travesty of investment policy.¹⁴

13. 7 THE COLLECTED WRITINGS OF JOHN MAYNARD KEYNES 155 (1973).

14. 12 THE COLLECTED WRITINGS OF JOHN MAYNARD KEYNES 82 (Donald Moggridge ed., 1983).

True, there are many roads to heaven, though I doubt there is any substitute for studying annual reports, as Buffett does with hundreds a year. But it is odd, is it not, that not one EMT theorist has seen fit to study Buffett? Since he began managing money independently thirty-five years ago, first at the Buffett Partnership and now at Berkshire Hathaway, through strong markets and weak, he has produced average annual rates of return of over twenty-seven percent. For thirty-five years he has been steadily mining the imperfect prices that EMT says do not exist!

The response to Buffett has been either a deafening silence or a clumsy attempt to avoid the engagement.¹⁵ He is said to be a five-sigma event—someone whose performance is five standard deviations superior to the norm—so that as a statistical matter he can safely be ignored. The idea seems to be that if we believe pitchers are now so "efficient" that no one can hit .300, we should study large numbers of average hitters, rather than a star who has systematically studied the pitchers and the elements of hitting, and best of all is willing to impart that knowledge.¹⁶ Or as *The Economist* suggested in August, 1992, echoing the academic dogma: in any coin-tossing contest, no matter how many rounds, someone will survive to win, but the identity of the winner is of no consequence.¹⁷ Thus, Buffett is explained: thirty-five lucky flips in a row. Or a few months later, in December, that same always-in-touch journal suggested that Buffett's success is attributable to his having used the "simple trading rule" of buying shares with relatively low ratios of market price to book value.¹⁸ Too bad, in its eagerness *The Economist* had not bothered to notice that among Buffett's most profitable investments have been companies such as American Express, bought in the 1960s, and Coca-Cola in the 1980s, or that he has written frequently of the irrelevance of tangible book values.

15. See in addition to the celebrated annual reports, available on a phone call to Omaha, Warren E. Buffett, *The Superinvestors of Graham-and-Doddsville*, HERMES, Fall 1984, at 4. See V. Eugene Shahan, *Are Short-Term Performance and Value Investing Mutually Exclusive?*, HERMES, Spring 1984, at 26, 28 (noting that superior results are available only to those with patience to underperform market for extended periods).

16. Large numbers of studies show that average returns for mutual funds match the market, more or less, which is pretty much like saying that the average is the average. BLUME & SIEGEL, *supra* note 4, at 20-21.

17. *The Stock-Picking Fallacy*, THE ECONOMIST, Aug. 8, 1992, at 15.

18. *Beating the Market: Yes, It Can Be Done*, THE ECONOMIST, Dec. 5, 1992, at 21, 22 [hereinafter *Beating the Market*].

Referring to Buffett, the chief international investment officer of Bankers Trust in London recently quoted his "favourite business school professor" as saying "75 years of quarterly data were required to establish statistically meaningful index outperformance."¹⁹ Ergo, Nolan Ryan was not a strikeout artist; he only did it for thirty years.

EMT and indexing also stand accused—and this is ultimately the more important aspect of the charge—of being destructive of that basic aspect of capitalism, watching the managers in the store. For an indexer, of course, stocks are homogeneous commodities, as finance teachers say, and there is no need to name the companies in the portfolio, much less know or monitor them. Do they inquire into company-by-company prospects and performance? Do they watch the managements? No, that is not what they do.

A second remarkable application of EMT goes by the euphonious acronym CAPM (pronounced CAP-M). This capital asset pricing model, in substance, creates for stocks a measuring stick of risk and then calculates the trade-off between risk and expected returns. Starting from the appealing principle of no-free-lunch, CAPM states that not only is risk measurable but that the expected payoffs, the rewards, are mechanically commensurate. Increase your risk, as CAPM measures it, and your rewards will grow apace.

Just how pervasive CAPM has become can be seen from a recent survey of mutual funds in *The New York Times*, according to which each fund falls into one of five categories of risk.²⁰ How can they know, I wondered? The answer was in the footnotes to the table. The *Times*, like almost everyone else, has accepted the standard wisdom that prospective risk can be measured. The *Times* assumed the existence of precise arithmetic yardsticks for the outcomes of such palpably uncertain matters as (investments in) the global oil business, discount retailing, pharmaceuticals—and I might add, newspapers—which are subject to political, competitive and other factors that quite clearly are not measurable.

The *Times* had used a formula derived from CAPM which measures the relative amount of historic short-term volatility of stock prices. As in all versions of CAPM, the *Times* assumed that prospective *long-term* business risk can be measured by looking at stock market fluctuations over the *short term*—in this case, the monthly prices.

19. Letter from Tony Thomson to Lou Lowenstein (Mar. 3, 1993).

20. *How Mutual Funds Performed Through June 30*, N.Y. TIMES, July 10, 1993, at 36.

CAPM has insinuated itself into the language and framework of finance so thoroughly that terms such as "risk-adjusted" and the "beta" of a stock are widely used, usually with little comprehension of what a mischievous model underlies them.²¹ CAPM confuses the past with the future and the long- with the short-term. It stubbornly refuses to acknowledge that in the typical business, there is no quantifiable risk, but only immeasurable uncertainty. As Keynes and Frank Knight explained a long time ago, these are two very different phenomena.²²

The beta of Capital Cities/ABC is 1.0, the same as that of the market index, but what could we possibly learn from that? The company owns a variety of media properties, including newspapers and the ABC network. Do we really believe that a computer, this remembrance of stock prices past, can tell us that a business with an emerging technology and in a changing regulatory environment will be no more or less risky over the next decade than the market as a whole? Or as Keynes succinctly put it, it is not simply that the calculation would be laborious, but rather that very little rational basis may exist for numerical calculation and comparison of any kind.²³

But wait, EMT and CAPM go still further. They say that the beta, or some similar proxy for risk, measures not just the risk, but the expected returns as well. If you want better than average results, buy a bunch of super-risky, high beta stocks such as the new issue of the latest trendy restaurant chain or biotech start-up. An extra dollop of profits will follow the beta as the night the day. (And a good night to you.)

Encouraging money managers to substitute betas for careful research and analysis is like offering Jack Daniels to an alcoholic. It is far too tempting. The crime is that it has succeeded so well.

One of the patron saints of CAPM, Eugene Fama, recently announced that the empirical basis for it had dried up.²⁴ He had not given up the search for a computerized proxy for measuring business risk, but he was

21. The beta of a stock is a measure of its price volatility relative to the market index, which is set at 1.0. A stock with a beta below 1.0, therefore, is said to be less volatile and less risky than the market as a whole.

22. KEYNES, *supra* note 12, at 149; FRANK H. KNIGHT, *RISK, UNCERTAINTY AND PROFIT* 214, 226 (rev. ed. 1971).

23. JOHN M. KEYNES, *A TREATISE ON PROBABILITY* 30 (1921).

24. Eugene F. Fama & Kenneth R. French, *The Cross-Section of Expected Stock Returns*, 47 J. FIN. 427, 427-29 (1992).

now ready to look elsewhere. What followed is truly sad. Scholar on scholar, and of course, *The Economist*, too, has said, well, CAPM may not be correct, but we will continue to use it until something better comes along.²⁵ And so have money managers, for whom a bad model seems to be better than none at all.²⁶ How are we to think about risk, they say, without some computer-based, arithmetic proxy? While a beta may not mean much, it has the one advantage that it is readily calculable.

Which is how it happened that the *New York Times*, perhaps unwittingly, aided and abetted an intellectual fraud.

Count 3: Stealing Shareholders' Votes

For roughly sixty years, the one share/one vote requirement of the New York Stock Exchange set the standard, not just for companies listed on the Big Board but for the market generally. This requirement not only survived for almost three generations, but almost no one tried to fiddle with it. It was an accepted part of the financial landscape that if a company invited the public to invest, the public and the management would have, share-and-share alike, equal voting rights. What changed was the pressure of hostile takeovers in the 1980s, which many corporate managers sought to escape by disenfranchising the public. No raider would pay a premium price for low-voting common stock, or if he did, so what? Seeing that it would lose listings to the over-the-counter market, which had no such equal-voting requirement, the Big Board decided to abandon its long-standing rule and to allow a variety of limited-voting stocks.

The issue is currently on the table, requiring governmental action of some sort. In 1988 the SEC adopted a rule that turned back the clock in part, but still allowed all the organized markets to list and trade nonvoting common shares—either of companies already public or just going public—under specified circumstances, such as if they were issued for cash. The rule was overturned by the federal courts, however, and the entire issue

25. See, e.g., Louis K.C. Chan & Josef Lakonishok, *Are the Reports of Beta's Death Premature*, 19 J. PORTFOLIO MGMT., Summer 1993, at 51; *Schools Brief: Risk and Return*, THE ECONOMIST, Feb. 2, 1991, at 72-73 (writing of questions raised earlier about CAPM); *Beating the Market*, *supra* note 18, at 21. Not surprisingly, Fischer Black also believes that CAPM still lives. Fischer Black, *Beta and Return*, 20 J. PORTFOLIO MGMT. 8 (1993). According to the popular Black-Scholes option pricing model, the value of an option depends on the price volatility of the underlying stock; if CAPM is dead, goodbye Black-Scholes.

26. Cf. THOMAS KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS (1962).

has now been dumped back into the lap of the Commission and ultimately perhaps Congress, too.²⁷ Companies are now issuing these dual-class common stocks in greater numbers. What to do?

One would have expected free market economists to recoil with horror at the notion of shareholders without voting rights. Without votes, the much loved market for corporate control would dry up. Much to my surprise, and to the utter delight of the Business Roundtable, scholars proceeded to marshal complex arguments to explain that new shareholders might indeed prefer an arrangement under which they turn over their capital with one hand and agree with the other that management will never, ever be held accountable for the use of the money.

It seems odd, but inhabiting a world of (almost) perfect competition, or at least one in which regulation is heavily suspect, many economists believe that prices reflect essentially all potentialities, however remote. As a practical matter, the controversy turns primarily on how to deal with companies that go public for the first time—initial public offerings (IPOs). These economists are saying that if investors don't get voting rights when they buy new issues, they don't pay for them; and if they don't pay for them, they have no cause to complain. More to the point, neither do the rest of us. Voting rights are private property; there is no social interest in preserving for the future the right to recall or dismiss a wayward board of directors or CEO.

Whatever the value of such a laissez-faire policy might be otherwise, in the context of the highly irrational, volatile IPO market, it is a triumph of abstract theory over day-to-day reality. As investors scrambled to buy shares of Boston Chicken when it went public last year, they gave it a market value of \$770 million, even though its projected sales (not earnings) for the year were only \$44 million. Knowing that the stock was likely to be "hot," how were they conceivably going to price something as remote in value as voting rights, assuming that they thought about them at all?

The Cambridge economist John Eatwell said, facetiously: "If the world is not like the model, so much the worse for the world."²⁸ I have never

27. In February 1994, with the tacit approval of the Securities and Exchange Commission, the New York Stock Exchange proposed a new rule allowing the issuance and listing of limited voting stocks. Objections have been raised and the outcome remains in doubt.

28. Robert Kuttner, *The Poverty of Economics*, ATLANTIC MONTHLY, Feb. 1985, at 74, 76.

seen it seriously argued that the IPO market is efficient, even for the basics of price and value. Compared to the ordinary stock market, itself hardly a model of rationality, the IPO market is inferior in almost all respects.²⁹ Continuity of volume is missing. Security analysts don't look at IPOs, and for that and other reasons, there is a stunning imbalance of information between buyers and sellers. (Buyers rarely see the prospectus that would tell them about their *nonvoting* rights until after they have decided to buy.) Transaction costs are very high—so high that the triple commissions alone should alert us to the probability that the other attributes of a "rational expectations" market are also likely to be absent.

Over the years, there have been few good studies of IPOs. But the data are very consistent: IPOs are a bad deal, the market does not price the product (new issues) properly. IPOs are bad in absolute terms, they are worse on a time-weighted basis, and they are worse yet when compared to the market as a whole. IPOs are, as one would expect, risky. CAPM tells us that on average they should, therefore, outperform the market. Not so. IPOs are a crapshoot. According to an extensive but informal 1985 study by *Forbes* of almost 2,000 IPOs during the 1975-85 period, more than half failed to show any profit from the offering price.³⁰ Nearly half the stocks were down fifty percent or more compared to the market average. On average the group was down twenty-two percent relative to the *Standard & Poor's 500* stock index, and the average annual return for the group was only about three percent. A more rigorous 1991 study by Professor Jay R. Ritter produced very similar results.³¹

In thus corrupting the public debate, the defendant EMT has rested its entire case on an abstract notion of rational behavior that implies, in Herbert Simon's words, "a complete, and unattainable, knowledge of the exact consequences of each choice."³² (Surely anyone who bought the Class A shares of Resorts International some years ago could have foreseen that a Donald Trump might someday offer \$135 a share for the fully voting

29. See Louis Lowenstein, *Shareholder Voting Rights: A Response to SEC Rule 19c-4 and to Professor Gilson*, 89 COLUM. L. REV. 979, 997 (1989).

30. Richard L. Stern & Paul Bernstein, *Why New Issues Are Lousy Investments*, FORBES, Dec. 2, 1985, at 152-54.

31. Jay R. Ritter, *The Long-Run Performance of Initial Public Offerings*, 46 J. FIN. 3 (1991).

32. HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR 81 (2d ed. 1957).

but closely-held Class B shares while offering only \$15 a share for the Class A.)

The deeper issue here transcends the private rights of shareholders. These Adam Smithian economists assume that shareholders own their voting rights in the same sense that they own their automobiles. Shareholders have rights to vote, not to be routinely traded away in private transactions because of a fear of power without accountability that is reflected in almost every aspect of American life and law. A "smart" economics student might think that in the political arena votes should be for sale. Or that charitable foundations should be allowed to accumulate wealth and power indefinitely. Or that one generation should be able to forbid their descendants from breaking up their landed or other estates. But as our Anglo-Saxon traditions long ago taught us, power that is frozen for all time will soon be abused. The fact that it was flash-frozen in a market-based IPO is irrelevant.

Count 4: Looting the Dividends

For a company on Main Street USA, owned by, say, ten shareholders, the issue of when to pay dividends, and how much, would seem fairly simple. Putting to one side the question of the investors' need for current income, the central issue would be whether the surplus—the freely available earnings of the company—would earn more for shareholders if left in the business or if distributed to them. If the reinvestment opportunities were not particularly attractive, shareholders would rightfully expect to see substantial payouts. And even if the performance has been good, some level of dividends would probably be in order. This normal pressure for dividends would be a useful check on management.

Sounds obvious, but EMT enthusiasts have managed to distort even this most basic issue of whether to keep the money in the corporation or return it to the owners. Through the reductionist lens of EMT, excessive cash will have no effect on how much is reinvested, and the normal desire of shareholders for an income on their investment is seen as an "irrational prejudice." ("Not only does it seem wrong," one particularly arrogant finance consultant/professor wrote, "it is difficult to believe that sensible folk could have held such beliefs."³³) More importantly, they have

33. Stephen A. Ross, *Comment on the Modigliani-Miller Propositions*, J. ECON. PERSP., Fall 1988, at 127, 127.

reinforced the obvious preference of corporate managers to do what they are only too willing to do, namely, to keep dividends as low as possible.

The problem began about thirty years ago, with a paper by Merton Miller and Franco Modigliani so celebrated that the thesis they propounded now goes simply by the acronym "MM."³⁴ Their concept was that the value of the company in the market should not be affected by whether the dividend rate is high or low, or even whether dividends are paid at all. Assuming among other things that a company's investment program is known, and assuming, too, that the financial markets are efficient, the value of the company has been fixed and shareholders should be indifferent to whether the current earnings are reinvested at the assumed rate of return or are paid out. (What is not paid out as dividends will show up as capital gains.) Scholars speak of the MM thesis as if it were a law of physics: EMT will guarantee the "conservation of value" regardless of how the corporate pie is capitalized or distributed.

The MM thesis is a basic tenet of modern financial theory, and literally hundreds of papers and books have been written on the subject. The underlying problem—and the error—is that economists and finance people would like to think only about the impact of dividend policies on stock prices, ignoring their impact on the business itself. M&M and their followers simply assume that, whether the payout is high or low, whether the company is broke or awash in cash, the size of the corporate jet and of management's acquisition spree will remain the same. In the "rational" world of finance, the rich and poor behave alike.

EMT provided the essential building block for the MM thesis and, of course, encouraged this preoccupation with market pricing. The potential for mischief here is considerable. If dividends are irrelevant, finance scholars say, to incur the tax on dividends is a waste. Better for the company to keep the money, *all the money*, they conclude. CEOs, of course, will agree—many of them being only too ready to expand the present business, buy-and-try a new one, or just feel as cozy as one can only feel with plenty of cash in the drawer. EMT and its offspring, the MM theory, legitimate these self-serving preferences.

34. Merton H. Miller & Franco Modigliani, *Dividend Policy, Growth, and the Valuation of Shares*, 34 J. BUS. 411 (1961); see also Merton H. Miller & Franco Modigliani, *Corporate Income Taxes and the Cost of Capital: A Correction*, 53 AM. ECON. REV. 433, 439 (1963).

* * *

At this point, the prosecution rested. Both sides summarized their arguments. The court tried the case without a jury, and the defendant was found guilty on all counts. A summary of the prosecution's recommendations on sentencing follows:

The prosecution asked that the defendant, EMT, be given a life sentence, with no possibility of parole. (The prosecuting attorney abhors capital punishment.) The sentence would be served by denying to all proponents of EMT access to any computer data base of historic stock prices.

The reason for requesting a life sentence was the heavy damage that EMT had inflicted. Most of it had been inflicted wilfully, or at least with a reckless disregard for the consequences. With no sign of remorse, the possibility of further harm could not be ignored. Graham and Dodd, who taught security analysis at Columbia, liked to say that the stock market is not a weighing machine, but only a voting machine, whereon countless individuals register choices which are the product partly of reason and partly of emotion.³⁵ EMT enthusiasts still cling to the weighing machine as an established, "proven" concept, so much so that, according to none other than a Columbia professor of security analysis, Graham and Dodd are "hopelessly" out of date. Confronted with EMT's failings, the response has been to fine tune the "weighing machine" concept, arguing that the contrary evidence only takes small bites out of it or that EMT ought still to be used until "someday," when something better will come along.³⁶

As part of a rehabilitation program, the prosecution suggested that EMT and its proponents receive a daily diet of annual reports and other primary financial material. Conventional finance had failed to recognize, say, the takeover bubble because of its deep disdain for accounting and financial analysis. Thus a respected finance text, fed to once-innocent business school students, still states as dogma that, "[i]nvestors gain little benefit from [corporate financial statements] because they contain no new information."³⁷ (Remember, the information has been "impounded"—

35. GRAHAM & DODD, *supra* note 11, at 23.

36. *See Beating the Market*, *supra* note 18, at 21-23.

37. THOMAS E. COPELAND & J. FRED WESTON, FINANCIAL THEORY AND CORPORATE POLICY 607 (3d ed. 1988).

instantly reflected—in the stock price.) Efficient market theorists failed to heed, therefore, the fact that the ratio of corporate income available for interest charges on junk bonds, which had been a reasonable if modest 2:1 at the beginning of the 1980s, had, by the mid-eighties so eroded that the income was twenty-five percent *less* than the interest charges.³⁸ Trusting prices, blind to the predator's ball, the den of thieves, and the barbarians at the gate, indifferent to debt, they stubbornly maintained that inflated prices and extravagant levels of debt implied not folly but social gains.

According to Chicago School and kindred spirits, markets simply do not fail. Instead, they blamed governments for the collapse of takeovers in 1989—for indicting Michael Milken, for permitting poison pills, for writing state antitakeover laws, and for closing the window on junk debt.

In response to a question from the court about motives, the prosecution said that EMT proponents had been driven by a search for elegance, a word that crops up again and again in the literature. "Elegance" reflects economists' desire for overarching solutions, algebraically expressed, that will provide the key to a host of issues, and in any season, rather than the messy, context-sensitive responses that most other social sciences produce. Indeed, economists tend to reject the label "social science," although that is obviously what economics is.

The pattern, the prosecution continued, is not new. Friedrich von Hayek—not Keynes, von Hayek!—had something similar in mind in his Nobel lecture of 1974, when he criticized economists for straining to mimic the quantitative precision of the physical sciences. In so doing, he observed, they were ignoring the fact that theirs is a complex social study in which quantitative data would be hard to find.³⁹ He might as well have been referring to CAPM and the like when he chided economists for ignoring what is important in favor of that which happens to be accessible to measurement.

* * *

The defendant was duly sentenced. When last observed, the authorities were feeding the prisoner a diet that included the writings of Buffett, Philip

38. WIGMORE, *supra* note 8.

39. Kriedrich August von Hayek, *The Pretence of Knowledge*, 79 AM. ECON. REV. 3, 4 (Dec. 1989, special issue). See also ALBERT O. HIRSCHMAN, RIVAL VIEWS OF MARKET SOCIETY 122 (1986).

Fischer, Graham, and Keynes, enriched with corporate annual reports. Color had returned to its cheeks, it had gained weight and was heard repeating as a mantra, "you are neither right nor wrong because the market agrees with you."

Dismayed by what they observed, the prisoner's relatives, CAPM and others, visited but once. They did, however, maintain contact with one another, meeting in a ritualized setting. Computers were booted up, votive candles were lit, and the following prayer was said:

EMT
We believe in thee.
We are as one,
Thy will be done.