

# The Revolution in Trust Investment Law

by John H. Langbein and Richard A. Posner

Trustees' conventional investment practices may be producing inadequate results in view of the growing body of evidence that stock picking and mutual funds are not outperforming, and perhaps may be underperforming, the market. The new learning has resulted in the "market fund," which should receive judicial approval for prudent investment standards. Thereafter trustees may be running a risk of surcharge in continuing to use the old methods.

**T**HERE ARE growing indications that the investment practices of fiduciaries are undergoing fundamental change. Although the new developments have occurred in institutional investing circles, ordinary private trustees who lag behind may soon be risking surcharge. A principal sphere of legal counseling is therefore affected.

A large and still growing body of empirical evidence demonstrates that conventional investment practices have produced consistently disappointing results. Not only have institutional portfolios as a group underperformed the broad stock market averages like the Standard and Poor's 500, but there appear to have been no significant exceptions among individual funds. Despite their heavy research and trading expenditures, professional fund managers have been unable to "beat the market." As this evidence has mounted, economic science has produced a convincing explanation of why their efforts have been doomed to futility—the so-called theory of efficient markets. Recent articles in the business press—the *Wall Street Journal*, *Forbes*, and elsewhere—have popularized the theory.

In response to these advances in our understanding of investment, a new investment strategy has been devised and is being ever more widely adopted. Portfolios that track the performance of the market as a whole ("market funds" or "index funds") have been constructed successfully and at astonishingly low cost. The legal analysis developed to sustain the prudence of this new investment strategy will inevitably bring into question and litigation whether the courts should continue to sanction the outmoded investment practices of the past. The trustee's duty to diversify investments is taking on a new scope and meaning, while the former duty of care re-

specting the selection of individual securities is being significantly de-emphasized.

This article is only an introduction to the important legal questions the market-fund phenomenon raises for trustees. Readers who want greater detail are referred to our article, "Market Funds and Trust-Investment Law," in Volume 1976, Number 1, of the *American Bar Foundation Research Journal*, which will be followed by a second article in that journal next year.

## Mutual Funds May Underperform

Between 1962 and 1972 several studies of the postwar investment performance of the American mutual fund industry were undertaken, beginning with the Wharton School investigation commissioned by the Securities and Exchange Commission. The results of the studies were stunning. Mutual funds as a group had not outperformed the market as a whole, despite the *expertise* of their managers. Profs. James H. Lorie and Mary T. Hamilton summarized the studies in their 1973 book, *The Stock Market: Theories and Evidence*: "The funds did not show superior judgment either in picking stocks or anticipating general market movements." No individual fund consistently outperformed the market. Some did better than others, but none outperformed the market with a consistency greater than the law of averages would predict. Indeed, when brokerage costs and management fees were taken into account, the average mutual fund underperformed the market.

Although academic investigators have concentrated on mutual funds because the reporting and disclosure requirements of the Investment Company Act of 1940 have produced a superior, uniform, and easily accessible data base, there is every indication that the investment record of other large institutional investors, such as bank trust departments, insurance companies, foundations, universities, and pension funds, is no better. According to the *Wall Street Journal* of November 13, 1975, 77 per cent of a large sample of pension fund managers "performed worse than the S&P 500 over the 10 years ended Dec. 31, 1974. In the five years ended that date, 90% of the funds failed to beat the market."

## Theory of Efficient Markets Formulated

Why have the financial experts and analysts been unable to turn their research skills to the advantage of their clients' portfolios? The answer, it seems clear, is that the experts have cancelled out each other. To see why this should be, we start with some truisms.

EDITOR'S NOTE: We regret that certain portions of this article as it appeared in the June issue (pages 764-768) were not in the correct order. The article is republished herewith in proper sequence.

First, the price of a security represents the present value of its future earnings. Second, for every buyer there must be a seller—someone who has formed an opposite judgment about the value of the security at its current price. If there were universal consensus that a particular stock was a bargain at its current price, no one who owned it would be willing to sell at that price. The price would have to rise to induce sellers to sell. Hence, we can say that presumptively any stock is correctly priced at its current trading level.

The only way to outperform the market—that is, consistently to identify undervalued or overvalued securities in advance of other investors—is to predict future earnings with superior speed and accuracy. But how are prophetic powers to be developed? Political, economic, and social changes at home and abroad profoundly affect security prices, but these phenomena are notoriously difficult to foresee; new information about individual companies is disseminated rapidly as a result of modern communications systems; and the securities laws have all but choked off inside information as a source of advantage in trading.

Stock analysts are thus largely limited to interpreting information in the public domain and available to other analysts, so that to outperform the market an analyst has to be better at making interpretations than his competitors. But as Professors Lorie and Hamilton conclude: "The ardent quest for undervalued or overvalued securities by 11,000 trained security analysts has made it extremely unlikely that more than very small and transient margins of superiority can be achieved by any of these analysts."

The theory of efficient markets posits that everything that is known or knowable about the price of a security is *already fully reflected in its price*. To be sure, there are some bargains—some securities that in retrospect will turn out to have been incorrectly priced. But they are so few that the cost of attempting to identify them, together with the cost of being wrong much of the time, outweighs any gain.

And make no mistake about it: picking and trading stocks are very costly activities. Analysts have to be paid, housed, and supplied with data, equipment, and supporting personnel. The brokerage fees incident to trading constitute a significant drain on performance. The large blocks of shares characteristic of institutional trading often suffer unfavorable market spreads. The expense of researching individual securities in the hunt for bargains induces investment managers to hold a smaller number of stocks than they would otherwise hold, and this underdiversification should also be reckoned as a costly feature of conventional portfolio management.

### Market Funds Develop

In recognition of the expense and futility of attempting to outperform the market, a new investment strategy for fiduciaries and other investors has been developed: the

"market" or "index" fund. A market fund creates and holds essentially unchanged a portfolio of securities designed to approximate some broad index of capital-asset performance, such as Standard and Poor's 500, the entire New York Stock Exchange, or conceivably an even broader cross-section of investment opportunities.

Within the past year or so, market funds have grown phenomenally. Exxon, Ford Motor, and Interlake have created them for a portion of their pension funds, and many other institutional investors are considering whether to do likewise. Several financial intermediaries, including the American National Bank of Chicago, Batterymarch Financial Management Corporation, and Wells Fargo Bank, have created market funds for pooling common trust and pension accounts, and the pension funds of several Bell telephone companies and of a number of labor unions have begun placing a portion of their assets in these vehicles.

Market funds have three salient characteristics:

First, the fund manager does not research the prospects of individual securities. He assumes that securities are correctly priced and saves his fund the expense of conducting research to locate bargains. Instead he buys each individual stock in the portfolio in proportion to its value relative to that of all other stocks in the market. For example, since I.B.M. constitutes about 6 per cent of the total value of all listed New York Stock Exchange stocks, and A.T. and T. about 5 per cent, the market portfolio will keep 6 per cent of its assets in I.B.M. and 5 per cent in A.T. and T. The smaller the company, as measured by its (value-weighted) common stock, the smaller its representation in the market portfolio. The smallest company in the S. and P. 500 on this basis is Sonesta Corporation, which would have a weight of one thousandth of 1 per cent in the market portfolio.

Second, as a corollary to its mode of stock selection, a market fund follows a "buy-and-hold" investment strategy that reduces trading costs to an absolute minimum. Trading is conducted only when cash inflows or redemptions require alteration in the net size of the fund or when substantial changes in the market price of a security require its inclusion in or exclusion from the portfolio in order to maintain the portfolio's fidelity to the market as a whole.

Third, market funds maximize diversification, a benefit worth pausing to explain.

### The Advantages of Built-in Diversification

The principle of diversification is captured at the intuitive level in the maxim that you should not put all your eggs in one basket. Modern capital market theory has developed an understanding of diversification that, if less quaint, is rather more compelling. It asserts a distinction between the diversifiable and nondiversifiable risks incident to a particular stock.

For example, in an industry that does not have industry-wide collective bargaining the risk of a strike against one firm can be offset (diversified away) by buy-

ing stocks in the same industry, because a strike against a single firm, while it will hurt that firm, will lead to a corresponding increase in the sales of the other firms. A risk may affect all the firms in an industry yet still be diversifiable away. The 1973 Arab oil embargo damaged the fortunes of all automobile makers, motel chains, and makers of recreational vehicles but benefited domestic oil producers, the coal industry, and oil exploration service companies. Owning shares in the last three groups of stocks would have enabled an investor to offset, in part anyway, the losses he would have incurred on his holdings in the first three groups.

On the other hand, much of the risk of stock ownership obviously cannot be diversified away simply by broadening one's stock holdings. Many of the factors that will depress the value of one stock simultaneously will depress the value of most (sometimes all) other stocks: a rise in short-term interest rates, a threat of war, a president's assassination, a general economic downturn, a change in tax law adverse to corporations or to corporate shareholders, to mention a few. This is why the day-to-day and even year-to-year fluctuations of the stock market as a whole are so steep, notwithstanding that the market as a whole represents a broadly diversified portfolio of equity securities.

The capital market investigators have shown that the degree of risk that cannot be diversified away (the so-called systematic risk) is compensated risk, in the sense that the greater the degree of nondiversifiable risk to a stock, the higher the average return. Conversely, they have shown that diversifiable risk is uncompensated risk. No one pays the investor a premium because his portfolio is underdiversified. Although an investment policy that achieves optimal diversification cannot eliminate nondiversifiable risk, it can eliminate the uncompensated diversifiable risk, which represents a deadweight loss for the investor who dislikes risk when it does not produce a higher return.

There is a serious misconception about what degree of diversification is optimal. The point has been made that if one carefully selects about thirty stocks, the portfolio will be as much as 90 to 95 per cent correlated with the movements of the market. But a 90 or even 95 per cent correlation by no means eliminates all or even 90 to 95 per cent of the diversifiable risk. In any given year the expected return of this thirty-stock portfolio would not be the same as the expected return of the market as a whole; rather, the expected return of the portfolio would be a fairly broad range on either side of the expected return. If the market as a whole rose in value (including dividends and appreciation) by 10 per cent in one year, there would be a good chance that the thirty-stock portfolio would rise by as little as 5.5 per cent. It is only when the portfolio reaches about two hundred stocks that the range within which its return can be expected to fall is reduced to 1 per cent on either side of the market's expected return.

Conventionally managed portfolios have been chroni-



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cally underdiversified, in large part because of the expense of doing fundamental research on such a vast number of stocks. The market funds have been able to achieve optimal diversification because they do no research. They have rid themselves of this uncompensated risk. (For detail, see James H. Lorie, "Diversification: Old and New," in the winter, 1975, issue of the *Journal of Portfolio Management*.)

### Seeing the Portfolio as an Entity

The two great discoveries of postwar investment experience—the futility of bargain-hunting for undervalued or overvalued securities and the central importance of optimally diversifying investments—have brought about a reorientation in thinking about the investment process that has major significance for the future shape of trust investment law.

It is now being recognized that a trustee's investment decision involves two conceptually distinct steps. One is evaluating specific assets that might be included in the trust. The other is combining specific assets to form the trust's portfolio, *i.e.*, the package of assets constituting the corpus of the trust. The law of trusts traditionally placed greater emphasis on the first step and much less on the design of the portfolio. Yet from the beneficiary's standpoint what counts is the performance of the portfolio rather than the performance of its individual components.

If the value of the portfolio rises from \$500,000 to \$600,000, what does it matter to the beneficiary whether this increase resulted from a uniform 20 per cent increase in the value of all of the assets in the portfolio or from larger gains in a few of the assets partially offset by losses in others? Conversely, if the portfolio has declined in value, it is of small comfort to the beneficiary to know that one of the components did spectacularly well rather

than that all declined. From the beneficiary's standpoint, the portfolio is the relevant security.

### Prudent Investor Rule and Market Funds

Virtually all of the money now flowing into market funds is trust money. Most market fund investors are pension funds, and they must satisfy the prudent investor standard of the Employee Retirement Income Security Act as well as the common law standard. Obviously, the substantial institutions that are placing trust money in market-matching vehicles have been counseled that the new investment strategy satisfies the legal standard.

It is true that trust investment law as reflected in case reports in many jurisdictions mirrors the old-fashioned investment strategy of individual stock-picking and consequent underdiversification. But this is only because most of the case law interpreting the trustee's duty of prudence dates from the 1930s or earlier. In applying the prudent investor standard, the courts of that day were guided by the investment practices then current in the investment community. Modern courts have not yet been presented with an occasion to apply modern principles of portfolio construction.

The trustee's duty to diversify, although recognized in a few cases and codified in Section 228 of the *Restatement of Trusts, Second*, has been largely dormant because in the past the idea of risk spreading was an intuitive notion unaided by scientific understanding of the advantages and requisites for optimal diversification. Likewise, in reviewing the trustee's discharge of his duty of prudence in selecting investments, courts followed then current investment practice and disregarded the portfolio as a whole: because trustees had invested on a stock-by-stock basis, the courts reviewed their investment results on that basis. So long as the universal custom of the investment community was to hunt for individual bargains, the courts asked only whether the trustee had conducted the hunt with due care.

The market funds of the 1970s have been constructed on the premise that the courts will apply the prudent investor standard differently to them. The trustee who recognizes the import of the new learning and who intentionally avoids individual stock picking in favor of a market-matching vehicle expects to be judged on how effectively his portfolio matches the market. His case is overwhelming. Whereas the vast majority of pension funds have underperformed the market, the existing market funds are tracking the market within a variance of 1 per cent. And these superior results are being achieved at greatly reduced management and trading costs, yielding savings that are passed through to the beneficiaries of the fund.

### Objections to Market Funds

How can the use of market funds be reconciled with the law of trust administration?

The trustee who pursues the market-matching strategy all but inevitably will acquire some stocks that if indi-

vidually selected would be characterized as speculative and hence as imprudent for trust investment. The stocks of imperiled companies will not bulk large in a market portfolio, because it weights each stock by the aggregate market value of the outstanding shares of the company. Since market value is the greater of (1) the capitalization of future earnings and (2) liquidation value (which is normally small), stocks of companies having poor earnings prospects already will have been bid down, and a further drop in their prices will have little impact on the fund. An attempt to exclude those stocks, if rigorously pursued, would impair the diversification of the fund and burden it with research costs—the very evils that the market fund was created to avoid.

There is in truth no reason for believing that the stocks of troubled companies are characteristically overvalued. The time to sell stock in a company headed for trouble is before the market discovers the trouble and discounts the price of the stock accordingly. But to beat the market to the punch is precisely what the investor cannot be expected to do with any consistency. In a market fund the portfolio is the relevant security, and there is no reason to examine the performance of its separate components.

In discussions of market funds the point is often made that if all investors adopted the passive "buy-the-market-and-hold" strategy, the market would cease to be efficient. There would be enormous gains to be made from stock picking because no one would be gathering or interpreting the information necessary to value stocks correctly in terms of their anticipated earnings. Although this point is correct, it has no practical significance. Even if all trustees adopted the passive strategy, there would still be many other investors, they would continue to search out undervalued stocks to buy and overvalued stocks to sell, and their activities would make it unnecessary and unprofitable for trustees to do any picking.

It is sometimes asked whether market funds are appropriate vehicles for specialized investment objectives. A trust fund set up to accumulate for a long period before making distributions will be seeking growth of its corpus, whereas a trust that is making heavy current distributions must have a portfolio selected to maximize income. Since the market fund is a suit that comes in only one basic size, is it unfit for these cases? The question is a legitimate one, but the example chosen to illustrate it—maximizing capital appreciation by selecting only "growth" stocks—a poor one. Growth is not an objective concept, as most of the owners of self-styled "growth" mutual funds have discovered to their rue. So-called growth stocks can underperform the market in spectacular fashion—Polaroid is one notorious recent example. Since the prospects for growth in the earnings of every company already will have been capitalized into the price of its shares, picking growth stocks is just another version of stock picking. It is a strategy that entails severe underdiversification as well as the other costs of conventional stock picking.

It is nonetheless true that a pure market fund will not suit the needs of every trust beneficiary, but adaptation of the concept to the specific needs of the beneficiary will be possible ordinarily without compromising the basic principle itself. For example, the principle of indexing equity investments does not prevent the fund from buying whatever proportion of nonequities, such as government and corporate fixed-income securities, it needs to increase its current income yields. The resulting portfolio will be less risky than the equity market as a whole, although by the same token it will not appreciate as rapidly in a rising market. Similarly, the specific tax status of the beneficiary may require some departure from the pure market fund idea. But this is a detail (although an important one) that can be handled within the broad framework of the market fund approach.

### Implications for Conventionally Managed Funds

Trustees who invest in market funds will not be engulfed in lawsuits challenging the prudence of their investment, although a test case or two is perhaps inevitable. The advantages of market funds are so overwhelming and so palpable that their legal validation cannot be in serious doubt.

The real impact of market funds on trust investment law will be felt in the opposite arena—that of conventionally managed funds. Beneficiaries of conventionally managed funds will begin to complain of their trustees' failure to achieve results comparable to the market funds. Trustees who ignore the new learning and who underperform the market will be hard pressed to justify their adherence to an investment strategy of demonstrated riskiness, costliness, and futility.

The biggest impact of the market fund on trust investment law will be a greatly augmented conception of the duty to diversify. The same body of economic research that has demonstrated the hopelessness of stock picking also has shown what significant and virtually costless returns are achievable from optimal diversification. Portfolios of fifty growth stocks or a handful of bonds are now indefensible for a trustee. If a trust fund is too small to diversify adequately at reasonable cost, the law will move toward the recognition and enforcement of a trustee's duty to pool small trust funds to the extent necessary to achieve sufficient diversification. ▲

### Pension and Profit-Sharing Seminar

THE SIXTH annual pension and profit-sharing seminar at Fairleigh Dickinson University, Madison, New Jersey, will be held August 9–13 by Business Seminars Institute, Inc.

Further information may be obtained from Business Seminars Institute, Inc., 428 Old Hook Road, Emerson, New Jersey 07630.

### Seminar on English Criminal Justice

THE SECTION of Criminal Justice is sponsoring a seminar on English criminal justice, October 21–29 in London. The program will examine in depth the processing of criminal cases in England from the initial investigation through final appeal.

Leading members of the British bench and bar, including the lord chief justice, will address plenary sessions.

Deadline for registration is September 1, and the cost of the seminar is \$100 for Association members and \$50 for their spouses.

Further information may be obtained from London Seminar, American Bar Association Section of Criminal Justice, 1800 M Street, N.W., Washington, D.C. 20036 (telephone 202/331-2260).

### Trust Fund Provides Exchange Subsidies

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The annual sum available is approximately \$4,000. Applicants must be regular members of the Association and normally qualified to participate in I.L.E.X. Applications must be received for consideration at any time during the year but must be filed at least six months prior to the estimated time for departure.

Further information and application materials may be obtained from the International Legal Exchange, American Bar Association, 1800 M Street, N. W., Washington, D.C. 20036.

### Juvenile Court Conference

THE SECOND annual juvenile court conference, cosponsored by the National Legal Aid and Defender Association and the National Council of Juvenile Court Judges, will be in Reno, Nevada, August 15–18, 1976. The registration fee of ten dollars will include two lunches and all conference materials.

The conference will cover federal constitutional cases; the role of defense counsel in juvenile court; defense in child abuse and neglect cases; and the right of children to privacy, child waiver, third-party waiver, and *Miranda* waiver.

Further information may be obtained from the National Legal Aid and Defender Association, American Bar Center, 1155 East Sixtieth Street, Chicago, Illinois 60637 (telephone 312/684-4000).