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Managing Investment Expenses: Trustee Duty to Avoid Unreasonable or Inappropriate Costs

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Managing Investment Expenses: Trustee Duty to Avoid Unreasonable or Inappropriate Costs

By Luther J. Avery and Patrick J. Collins*
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Recent academic research indicates that cost control plays a critical role in the management and accumulation of wealth. Indeed, it is cost control, as opposed to superior investment skill, that often separates successful investment programs from their mediocre counterparts. Cost control, however, is much more than low fees and commissions. Trust portfolios may exist in highly "virulent" cost environments that generate high levels of turnover (taxes) and that generate substantial soft-dollar income for the professional trust company. Hidden trade execution costs can be substantial; and, such costs are difficult to quantify. Likewise, seemingly "benign" investments, such as index funds, may actually subject the trust estate to a high level of unnecessary expenses. The newly adopted Prudent Investor standards suggest that performance and expenses should be decoupled (i.e., good performance does not justify inappropriately high fees) and that each area should be evaluated separately.

The trustee's duty to manage expenses prudently is little understood and not the subject of extensive litigation [see, e.g., Scott on Trusts §§174,174.1, 188.3 and annotations to the Restatement of Trusts 2d §§174, 188]. Most litigation about costs involves the reasonableness of attorney fees and who will pay them. There is no litigation involving the issues discussed in this paper and, despite extensive academic discussion of the impact of costs on investment returns, from the legal perspective there are very few learned papers or discussions in texts. Conceptually, the issue of the trustee's duty to avoid unreasonable or inappropriate costs is a question of prudence. Thus the subject can encompass traditional issues like what expenses the trustee can charge against the trust and what must be borne by the trustee, or the old question of what the trustee can delegate. In this paper we pose the questions:

- 1) What are "costs" for purpose of inquiry about the trustee's performance?
- 2) What is the standard of measurement of prudence of the trustee?

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- 3) Is there evolving a new standard of performance arising out of enactment of the Uniform Prudent Investor Act or of the Restatement of Trusts, 3d?

THE RESTATEMENT OF TRUSTS 2D AS AMENDED BY RESTATEMENT 3D

The Restatement of Trusts, 2d ("Res.Trusts 2d"), §174 mandates that the trustee exercise reasonable care and skill (Calif. Probate Code §16014). Res.Trusts 2d §188 (Calif. Probate Code §15684) details the power to incur expenses. Section 188 states "The trustee can properly incur expenses which are necessary or appropriate to carry out the purposes of the trust and not forbidden by the terms of the trust, and such other expenses as are authorized by the terms of the trust." Comment f, relying on §174 states "...Thus although the trustee can properly incur expenses in employing agents or in making repairs, he is under a duty not to incur a greater expense than is reasonable under the circumstances, and is under a duty to use care in the selection of agents and in determining the necessity and character of the repairs." Scott on Trusts and the legislative history of the California Probate Code do not discuss what is "reasonable."

The Restatement of Trusts 2d was partially updated by the publication of Restatement of the Law Third (Prudent Investor Rule (particularly §§227-229) and was followed by the Uniform Prudent Investor Act (1994) modified and enacted into article 2.5 of Division 9 Trust Law of the California Probate Code effective January 1, 1996. Of particular interest is Probate Code §16050 (investment costs): "In investing and managing trust assets, a trustee may only incur costs that are appropriate and reasonable in relation to the assets, overall investment strategy, purposes, and other characteristics of the trust."

THE UNIFORM PRUDENT INVESTOR ACT

The California Uniform Prudent Investor Act requires trustees to "invest and manage trust assets as a prudent investor would, by considering the purposes, terms, distribution requirements, and other circumstances of the trust. In satisfying this standard, the trustee shall exercise reasonable care, skill, and caution."

[Probate Code §16047(a)] In addition to the traditional common-law duty of loyalty [§16002], the new Act instructs the trustee to "avoid unreasonable or inappropriate costs [§16050] and permits the trustee to receive advice from an investment expert [§16052(a)]."

Trustee success in exhibiting the requisite prudence is ultimately a matter of facts and circumstances; and, therefore, prior to taking action it is reasonable to make inquiry into the costs and other relevant factors involved in:

- Obtaining expert advice;
- Acquiring and holding investments; and,
- Managing the trust portfolio on an ongoing basis.

THE UNSOPHISTICATED FIDUCIARY AND THE DECISION TO OBTAIN INVESTMENT EXPERTISE

Beyond tax savings motivations, grantors sometimes establish family [private] trusts because they recognize that beneficiaries may benefit from investment expertise. Absent a trust, lack of sophistication may make the beneficiary a target for, in William Hoisington's words: "third party importuning."¹ In such cases the unsophisticated fiduciary may seek to delegate investment functions to competent experts. Selection of a competent and trustworthy investment expert is not a trivial concern. Indeed, a recent study of the Prudent Investor Standard argues that "delegation is itself a fiduciary obligation that cannot be treated lightly." Furthermore:

Delegation does not divorce the fiduciary from the fundamental duty to exercise care and skill in all matters. This obligation is breached by negligence either in the selection of a delegee, the design of the parameters of the delegation or in monitoring the delegee's performance.²

In practice, however, a friend/relative/fraternity brother/service club president/co-director on the church or charity board may be selected as investment advisor because he or she works at a bank/brokerage firm/insurance carrier/trust company that sells investment prod-

ucts or services. In place of a critical, unbiased, and independent evaluation, personal relationships and community interactions may become the primary determinate for the choice of the investment "expert." The uncritical selection of an advisor often occurs despite, once again in Hoisington's words: "the plethora of ignorance, active concealment, and outright nonsense afoot in the financial press and in the community of professional investment advisors."³ The source of investment advice often has important bearing on the cost of the advice. Therefore, the grantor who nominates a corporate trustee or the unsophisticated fiduciary who selects an investment advisor should determine and document that such costs are reasonable and appropriate.

The fiduciary must exercise "care, skill and caution" in order to assure that the advice is prudent and suitable. If "care" can be defined as extensive consideration before committing trust assets to a particular course of action; if "skill" can be defined as expertise in financial economics and the statistical and quantitative methods underlying Modern Portfolio Theory; and if "caution" can be defined as an unbiased and critical examination of the likely monetary effects of asset management decisions, then the fiduciary or the agents of the fiduciary must demonstrate competency in these areas. Although there are many ways to demonstrate competency, social relationships or employment titles are not among them. Indeed, the most honest and trustworthy acquaintance may well inflict great unintentional harm on trust beneficiaries because the above-mentioned attributes were lacking. There is an adage from the world of qualified plans, "a good heart and an empty head is a *per se* ERISA violation." In this article, we consider sources of investment advice as well as the level of possible charges, fees, and expenses that may be incurred.

HIRING A PROFESSIONAL TRUSTEE: SOME FIDUCIARY CONSIDERATIONS

There are traditional reasons to consider a professional or corporate trustee:

- 1) Administrative, Accounting and Tax Services;
- 2) Malpractice liability insurance;
- 3) Ability to make unbiased decisions; and,
- 4) Corporate longevity.⁴

¹ Hoisington, W. L. "Modern Trust Distribution Design and Implementing Investment Strategies," *California Continuing Education of the Bar* (June, 1998), p. 7.

² Anderson, R. L. & Hoisington, W. L., "Practical Applications of the Prudent Investor Standard," *Proceedings of the New York University 56th Institute on Federal Taxation*, New York University (1998), p. 29-18.

³ Hoisington, W. L. "Fiduciary Principles, Modern Financial Theory and Practical Implications For Trust Design and Administration," *Symposium by Edward C. Halbach, Jr., William L. Hoisington, and Michael J. Puzo* (February, 1998), p. S-6.

⁴ Harker, J. E., "Choosing a Trustee: The Case for the Corporate Fiduciary," *Probate & Property* (May/June, 1994), pp. 44-47.

However, professional trustees should not be selected without adequate investigation into both the level of fees and expenses that they will charge, and into their management and accounting practices. When the professional trustee provides proprietary investment products or in-house broker services, special care is warranted. Although professional trust companies market their legal resources, investment track record, and administrative services, many are, in fact, becoming financial product sales organizations utilizing the marketing and compensation strategies customarily associated with stock brokerage firms. Here is how one trust company executive justifies this trend:

Whether called financial consultants, stockbrokers or investment advisors, our competitors traditionally pay no base salary to their sales force. As a result, a salesperson's entire livelihood is dependent upon sales results. This compensation structure and the subsequent pressure on the sales officer, near anathema to typical trust departments, clarifies and focuses the sales officer like nothing else can. This structure induces stockbrokers and insurance agents to work long hours, weekends and even holidays because if they don't make it happen, it doesn't happen. The long-term nature of trust sales, as opposed to other financial services, makes implementation of a fee-only compensation structure difficult at best. However, in light of the structure of our competition, and the motivational impact upon their sales force, trust organizations must counter with as proactive business development model as possible. The enthusiasm, commitment and perseverance found in successful sales officers are an absolute necessity in our increasingly competitive environment.⁵

As the evolving standards of prudence force bank trust departments to jettison their past practices and document compliance with the Prudent Investor Act, there is, nevertheless, pressure to maintain profitability by increasing business volume either through

expansion of the customer base or through increased securities transaction activity and product offerings. The upturn in bank merger and acquisition activity puts a premium on short-term profitability from all areas of banking operations. In this environment, the cautious fiduciary is mindful that:

Bank management has become keenly aware of the need to grow non-interest income and part of the onus to accomplish this goal falls to the Personal Trust Department.... The days when trust administrators could spend most of their time concentrating exclusively on current customers and account related issues have gone the way of the 8-track stereo and leaded gasoline. Today's most successful organizations require their trust administrators to wear multiple hats. Of these hats, the sales and marketing hat is becoming bigger and more important every day.⁶

It is too early to assess how well the professional trust industry will weather the competitive pressures and the profitability squeeze. Perhaps the passage of the Uniform Prudent Investor Act will provide a sufficiently tight regulatory environment so that the professional trustee industry does not succumb to the widespread market misconduct escapades that characterized the insurance industry response to profit pressures. The increased emphasis on marketing, however, will undoubtedly mean that banks and trust companies will be pitching their investment track records to prospective customers in competition with insurance companies, mutual funds and investment managers. Moreover, some banks tend to have high employee turnover, unrealistic case loads and inadequately trained persons assigned to tasks.

A good starting point for the unsophisticated fiduciary who is considering delegation of investment responsibility to a professional trustee (or, for that matter, to any private money manager) is the standard of care in Calif. Probate Code §16047 discussed in the checklist of relevant issues found in the "Selection of the Delegee" section of "Practical Applications of the Prudent Investor Standard."⁷ The checklist helps the fiduciary to make sure that he has covered important topics in the areas of:

⁵ Pritchard, J. L., "Trust Sales Officers (Do We Still Need Them?)," *Trusts & Estates* (May, 1998) pp. 40-44.

⁶ Harlow, S. A., "Role of the Trust Administrator in the Sales

Process," *Trusts & Estates* (May, 1998) pp. 45-49.

⁷ Anderson & Hoisington, *Op. Cit.*, pp. 29-19 and 29-20.

- Trust purpose
- Operations and Costs
- Investment Management & Performance
- Investment Philosophy, and
- Trading Process.

SEEKING ASSET MANAGEMENT ADVICE FROM A BROKER

As an alternative to selecting a professional trustee or money manager, the unsophisticated fiduciary may wish to maintain control of investment decisions. In many cases, recognizing a lack of solid grounding in financial economics, practical investment market experience, and asset management skills, the unsophisticated fiduciary may seek guidance from a stockbroker regarding investment strategies. The prudent fiduciary should exercise (and document) particular care when selecting a broker because, although broker-provided advice may be readily available, academic research has called into question its efficacy.⁸ Consider, for example, a passage from a widely used investment text:

What about today's full-service stockbrokers? In the first place, they go by different titles, such as financial consultants or investment executives (or simply registered representatives)... Brokerage firms now derive only about 15 percent of their revenues from commissions paid by individual investors.... and the typical full-service stockbroker, whatever he or she is called, now derives less than 50 percent of his or her income from customer commissions. How do brokers earn the rest of their income? One alternative is to sell mutual funds owned by their own firms. These funds carry a load or sales charge, and the broker selling shares in these funds earns part of this sales charge. Although a large brokerage firm may sell dozens or hundred of different funds, there is evidence that brokers are pressured to put their customers into the in-house funds regardless of whether such a move is in the customer's best interest. Another alternative involves 'principal transactions,'

or brokerage firms trading for their own accounts. When these firms end up owning shares they really do not want, brokers are often encouraged to sell these securities to their customers, with some additional financial incentives provided.... This activity now accounts for almost twice the income as does commissions from individual investors. Yet another source of income is the sale of new issues of securities. Underwriting new issues is a profitable activity for brokerage firms, and brokers may have an incentive to steer their customers into the new issues.⁹

Critical judgment of the brokerage industry is not confined to academic texts. *Business Week* magazine, for example, lists the following brokerage industry characteristics:

- **Pressure**—The compensation system at brokerage firms creates intense pressure on brokers to generate a high volume of commissions.
- **Incentives**—Brokers are given extra incentives, such as Rolex watches and all-expense-paid vacations, to sell special high-profit-margin products with little regard to their suitability for customers.
- **Bad Advice**—Firms push brokers to recommend in-house mutual funds, where the firm earns management fees, instead of funds run by outside managers. Most in-house funds have mediocre performance records.
- **Bonuses**—Many firms recruit top producers from other firms with huge up-front bonuses and extra-high commissions. That gives the producers an added incentive to promote excess trading.
- **Poor Information**—Firms don't provide customers information on the overall return on their investments and aggregate commissions they've been charged.¹⁰

⁸ See, for example, Walker, M. & Hatfield G., "Professional Stock Analysts' Recommendations: Implications for Individual Investors," *Financial Services Review* (1996), pp. 13-29.

⁹ Jones, C. P., *Investments: Analysis and Management*. John

Wiley & Sons (New York, 1991), p. 91.

¹⁰ "Can You Trust Your Broker?" *Business Week* (February 20, 1995), pp. 70-75.

Full-commission investment firms and insurance agents usually offer financial advice for "free." Because of the compensation and sales-incentive structures prevalent in the insurance and brokerage industries, the trust fiduciary may, at the end of the day, discover that he has overpaid for the free advice no matter how well intentioned or trustworthy its dispenser.

COSTS OF INVESTMENT MANAGEMENT STRATEGIES

A central issue informing the choice of investment guidance is the fiduciary's view of active vs. passive investment management. For the most part, professional trust companies and stock brokerage firms pursue "active" investment management strategies. Although active management strategies are usually *more* costly, there is nothing in the Uniform Prudent Investor Act that expressly prohibits active management. The reporter's commentary to the Restatement of the Law Third: Trusts (§227) provides examples of passive and active strategies:

Investing in index funds that track major stock exchanges or widely published listings of publicly traded stocks is illustrative of a thoroughly passive but practical investment alternative to be considered by trustees... [Active strategies] involve search for advantageous segments of a market, or for individual bargains in the form of underpriced securities.

The commentary points out that active strategies increase expenses, transaction costs, and risk and must be evaluated accordingly:

A decision to proceed with [active management] involves judgments by the trustee that:

Gains from the course of action in question can reasonably be expected to compensate for its additional costs and risks;

The course of action to be undertaken is reasonable in terms of its economic rationale and its role within the trust portfolio; and,

There is a credible basis for concluding that the trustee—or the manager of a particular activity—possesses or has access to the competence necessary to carry out the program....¹¹

The key point to remember is that if the fiduciary elects to manage the trust estate by employing active portfolio management strategies, he must be able to:

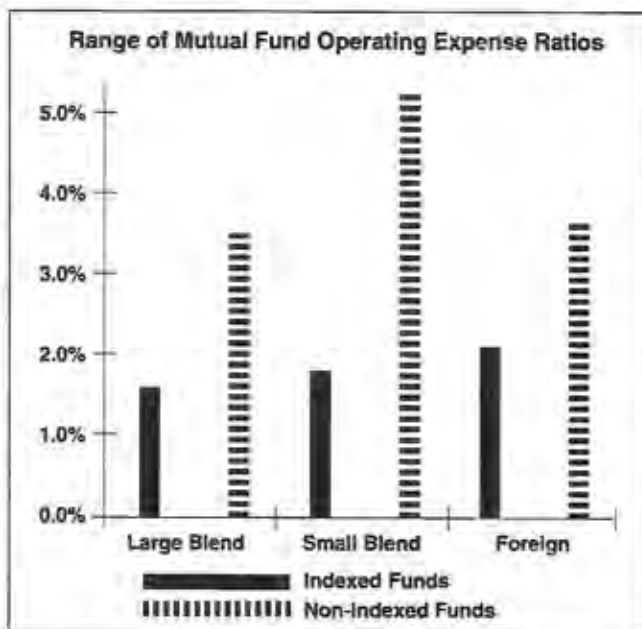
- 1) Clearly identify the costs of such a choice; and,
- 2) Document that the strategy added a value sufficient to overcome costs in excess of those of a comparable passively managed portfolio.

RANGE OF EXPENSES FOR MANAGED INVESTMENT FUNDS

The graph, below, illustrates the range of expenses for three categories of indexed and non-indexed mutual funds. The categories include large blend (funds investing in large capitalization US company stocks with neither a growth nor a value bias), small blend (funds investing in small capitalization US company stocks) and foreign (funds investing in foreign company stocks). Averages for each respective category are also marked. The graphs are based on data reported in the November 30, 1998 release of Morningstar Principia Pro database. To avoid bias in the results, funds reporting no expense ratio, funds with apparently misreported expense ratios, institutional funds with enormous minimum purchase requirements, and funds with expense ratios greater than 10% per annum have been excluded from these calculations.

¹¹ *Restatement of The Law Third: Trusts* The American Law

Institute (1992), pp.28-30.



These results indicate that, ignoring the trading costs of portfolio turnover and the tax costs of active investment management, indexed mutual funds are not necessarily less expensive than their actively managed counterparts. Index funds are, *on average*, less expensive but there is no guarantee that a particular index fund is less expensive than an actively managed counterpart.

In order to demonstrate prudence in determining if the costs of portfolio management (either active or passive) are reasonable, the unsophisticated fiduciary must know how to identify and evaluate relevant factors.¹² Moreover, the unsophisticated fiduciary must learn to maintain credible records of the factors and the alternatives considered or how or why the costs were incurred. Certainly, the message of the Prudent Investor Rule is that a record of procedures must be maintained. The text that follows provides brief discussions of some of the more important areas to consider.

COMMISSIONS AND FEES

Critical evaluation of the expenses of investment acquisition and portfolio management demands a full understanding of the total costs incurred by the trust estate. If the fiduciary delegates day-to-day investment management tasks to a bank trust department that provides brokerage services or if the fiduciary selects a commission-based broker or financial planner to provide investment guidance, it is important to realize that com-

mission charges and ongoing trustee/investment fees may not be the most important determinates of total cost. Market impact costs and tax liabilities often dominate all other costs. Indeed, there is some evidence to suggest that *higher* commission costs result in better trade execution efforts with the result of lower market impact costs and overall total cost savings.¹³ The unsophisticated fiduciary should consider the possible use of an auditor or consultant to evaluate the prudence of the expenses of the investment. It is not sensible to rely on the statute of limitations or a petition for a court order as the test of whether investment management was prudent.

Many fiduciaries believe that one of the most effective ways of increasing real return is to minimize brokerage commissions. The rise of the discount brokerage industry and on-line electronic trading are built on this supposition. Commissions, however, represent only a small portion of the total charges and expenses that must be born by the portfolio. Investment expense charges, trading costs, portfolio management fees, advisory fees, wrap-fees, and trustee/custodial fees constitute a potentially greater and more damaging weight on portfolio return. For example, one professional trustee advertises that "no sales charge is deducted from any contribution when made." The trustee advertises that it offers a selection of products that have passed extensive qualitative review with respect to their management and quantitative review with respect to their historical performance. For this due diligence, the trustee charges a 40 basis point fee (quoted as part of trustee/custodial fee schedule). After extensive due diligence, the trustee suggests that its proprietary "low-expense" S&P 500 index fund is a good choice. It currently charges

- a contract fee (maximum of \$30)
- a seven-year deferred sales charge
- an investment management fee (37 basis points)

For comparative purposes, the fiduciary could have elected to invest in Vanguard's Index 500 Trust that levies no contract fees, loads or deferred sales charges, and that operates at an expense ratio of under 20 basis points. The net result is, of course, a program that advertises institutional investment expertise; but attaches an expense burden approximately four times greater than that of a comparable retail investment alternative.

Another example of "high cost" indexing is the Stagecoach Equity Index B fund. This fund is marketed by Stagecoach Funds, a subsidiary of Wells Fargo Bank. The fund charges a 1.45% annual management

¹² See, for example, Collins, Patrick J., "Fiduciary Duty to Monitor and Review Passively Managed Mutual Funds," in the forthcoming edition of *Journal of Investing*.

¹³ Logue, D. E., & Rader, J. S., *Managing Pension Plans*. Harvard Business School Press (Boston, 1998), p. 271.

fee, which includes a 12b-1 fee of 0.75%. The fund also imposes a 5% back end load.

The onus of extra charges can dominate the commission burdens on the trust corpus and can erode long-term returns. Seemingly small differences between alternative investment costs can balloon in significance over a long period because of compounding. The following matrix demonstrates the potential negative effects of ongoing investment expenses on ending dollar values:¹⁴

<i>Investment Expense</i>	Wealth Reduction Over 10 Years	Wealth Reduction Over 20 Years
1%	-9%	-18%
2%	-18%	-33%

Although, in the real world, it is impossible to implement and manage a "frictionless" portfolio (i.e. invest without taxes and costs), nevertheless, the matrix suggests the fiscal significance of cost "friction." The fiduciary duty to avoid unwarranted or inappropriate charges and fees must be observed. A reduction of 1% in investment costs is the equivalent of earning an additional 1% *risk-free* compounded return.

DO EXPENSIVE INVESTMENT PROGRAMS PRODUCE SUPERIOR RETURNS?

There is another reason why the prudent unsophisticated fiduciary must consider the fees and expenses associated with investment options. A recent study entitled "Characteristics of Winning Mutual Funds" concludes that there is an inverse relationship between portfolio performance and expense: the higher the expense, the lower the relative performance. The authors analyzed the relationship between investment performance over the five-year period ending December 31, 1996 and the following elements:

- Loads
- Expense ratios
- 12b-1 fees
- Net assets

- Manager tenure, and
- Turnover ratio.

In brief, the study concludes:

- 1) No-load funds exhibit, on average, investment performance significantly higher than load funds; and that this performance remains statistically significant even when the impact of loads is ignored;
- 2) The median expense ratio for equity funds equals 1.22%. Funds with expense ratios less than or equal to 1.22% exhibit significantly higher returns than funds with expense ratios above the median;
- 3) Funds that charge 12b-1 fees exhibit lower returns, higher expense ratios and greater manager turnover; and,
- 4) The median turnover ratio equals 60% annually. Funds with turnover ratios above 60% exhibit, on average, lower returns and higher expense ratios.

The analysis concludes that, instead of concentrating on recent track record, the prudent investor should screen the universe of available funds with preference for:

- 1) True no-load funds;
- 2) Annual expense ratio equal or below the median;
- 3) Manager tenure greater than or equal to six years;
- 4) Annual turnover ratio less than or equal to 60%.¹⁵

The results of this study parallel those of a long-term (1962 to 1993) study of mutual funds. The study calculated that the average fund asset turnover equaled 77.3%. Trading activity resulted in a reduction in fund performance return by 0.95% of a trade's market value. Additionally, load funds underperformed no-load funds by 80 basis points per year.¹⁶ Empirical evidence strongly supports the position that investment success and management fees are inversely related. All else being equal, this reinforces the duty to select the lowest cost source of investment advice, the lowest priced trust and administrative service

¹⁴ Calculated as the difference in terminal value of \$1 continuously compounded at applicable rates of return over the planning horizon. Assumes a gross annual return of 10%.

¹⁵ Israelsen, C. L., "Characteristics of Winning Mutual

Funds," *Journal of Financial Planning* (April, 1998), pp. 78-87.

¹⁶ Carhart, M., "On Persistence in Mutual Fund Performance," *The Journal of Finance* (March, 1997), pp. 57-82.

provider, or investments with the lowest expense structure.¹⁷ The prudent fiduciary cannot assume that high fees provide assurance of superior asset management.

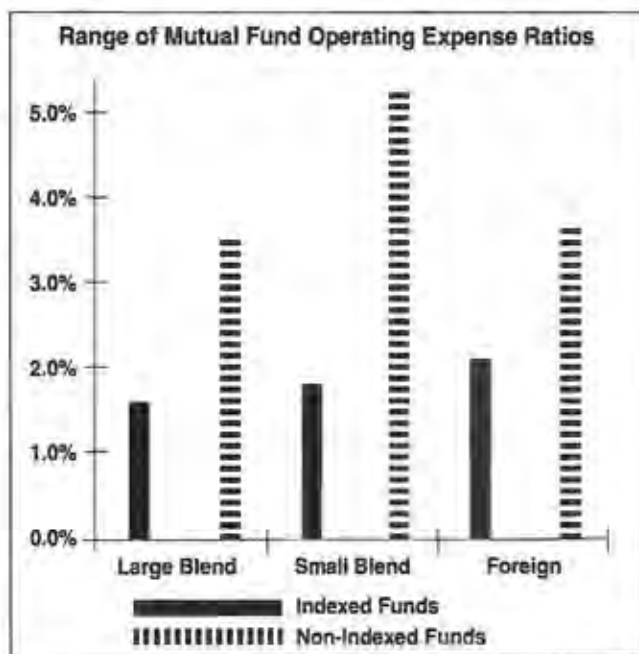
Providers of investments, investment management services, and investment advisory services must be able to fully disclose and document all fees and expenses; and, they must justify the reasonableness of their fees. For example, a recent study of mutual fund investments suggests that "fees may be justified if they allow the fund to lower other costs or improve performance. Front-end load charges, deferred sales charges, and redemption fees may induce investors to invest longer term, which may allow the fund to reduce its transactions costs and expenses. Funds with 12b-1 fees, fees for distribution costs such as advertising and commissions, may become larger than funds without these fees due to the additional marketing and incentives paid to brokers. If there exists economies of scale associated with mutual funds, overall expenses may be lower for funds with 12b-1 fees. Fees may also be justified if they provide more money for the fund to gather information than can be used to improve its risk adjusted performance."¹⁸

After reviewing equity funds listed in Business Week's Mutual Fund Scoreboard during the period 1987 to 1992, the authors find that funds with front-end loads have lower risk adjusted returns than funds without a front-end load. Likewise, they conclude that although the absence of fees does not necessarily result in superior performance, investors should not expect that "high-priced" investment management will produce superior results. Specifically, "we find that 12b-1 fees, deferred sales charges, and redemption fees increase expenses and only a limited number of funds with these fees earn a risk adjusted return that can justify them. Since these fees receive much less exposure than front-end sales loads, the SEC should consider regulation requiring funds with these fees to prominently display their existence alongside any information about front-end loads. This should impede funds from substituting these "hidden loads" for the easily recognizable front-end loads at the expense of uninformed investors..."¹⁹

To determine how commission structures were

utilized in indexed and actively managed funds, we extend our previously described fund review to ascertain the prevalence of commissions (including 12b-1 fees, and front and back end loads (deferred sales charges)) in each category of funds. The results of our review are presented graphically. We find that, in each category, both indexed and actively managed mutual funds are available as either true no-load funds, or with a broad variety of commission structures. Actively managed funds tend to have significantly larger average 12b-1 fees than their indexed counterparts.

Interestingly, indexed large blend funds have significantly higher average 12b-1 fees than indexed small blend funds. Further, there are over six times more indexed large blend funds (85) than indexed small blend funds (13). Both observations may be attributable to the recent stellar performance of the S&P 500 index. Brokers may be clamoring for S&P 500 index funds to sell to their clients, and seeking compensation from 12b-1 arrangements. The recent relatively poor performance of the Russell 2000 has apparently generated less enthusiasm for small blend indexes.

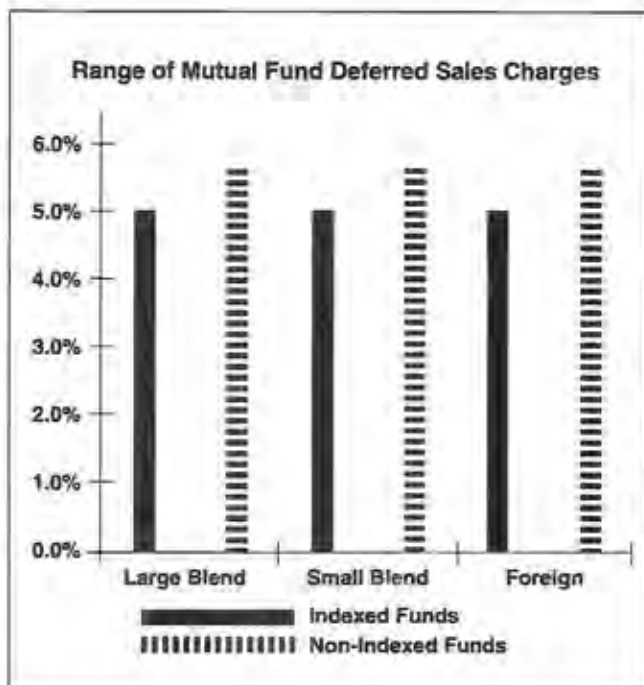
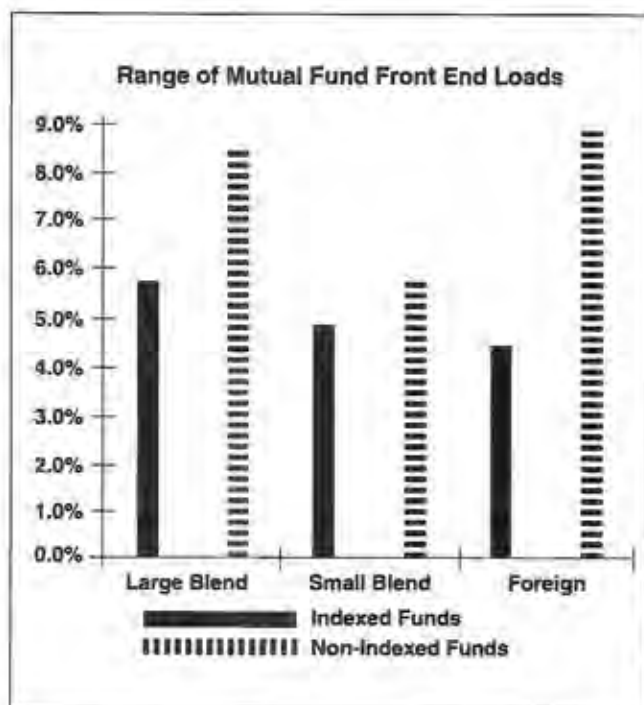


¹⁷ The U.S. Department of Labor Pension and Welfare Benefits Administration has been very concerned regarding the negative impact of high fees within 401(k) plan qualified trusts. In their publication entitled "A Look At 401(k) Plan Fees," (<http://www.dol.gov/dol/pwba>), the DOL states: "Remember, too, that higher investment management fees do not necessarily mean better performance. Nor is cheaper necessarily better. Compare the net returns relative to the risks among available investment options. And, finally, don't

consider fees in a vacuum. They are only one part of the bigger picture including investment risk and returns and the extent and quality of services provided," p. 17.

¹⁸ Dellva, W. L., Olson, G. T., "The relationship between mutual fund fees and expenses and their effects on performance," *The Financial Review* (1998), p. 86.

¹⁹ *Ibid.*, p. 101.



If the unsophisticated fiduciary can document that professional investment management has, in fact, added value to the trust portfolio after considering both the level of portfolio risk and all fees, charges, transaction costs, and expenses, it may be reasonable to continue the investment program. For many investment pro-

grams, however, such has not been the case. A recent study of 69 bank common ("pooled") trusts utilized for funding portfolios of estates and trusts over the period 1984-1992, found that the annual benefit of the security selection of the trust managers averaged only 3 basis points *before fees*, and that the annual "benefit" of market timing was a negative 137 basis points.²⁰ The results of independent studies make it imperative that the fiduciary critically evaluate, on an ongoing basis, the investment performance of the fund manager as well as the level of costs imposed upon the trust estate.

In the event of poor investment performance, evidence of systematically high investment costs may weaken the ability to conduct an effective defense in fiduciary surcharge cases. The question exists: when a beneficiary seeks to surcharge a fiduciary for poor investment management are there now two avenues of analysis? The first avenue is "relative portfolio performance" with the ancillary analysis of the adequacy of the documentation to demonstrate compliance with the Prudent Investor Rule. The second avenue is the relative comparison of the effective cost of the performance of duties by the fiduciary. Is the quality of performance to be measured against expense ratios as well as other hidden fees and trading costs? The fiduciary who fails to demonstrate prudent cost management is not only causing avoidable losses but is also open to the argument that more prudent cost management would also be reflected in a greater portfolio return (whether "income" or principal enhancement).

BEYOND COMMISSIONS AND FEES: MARKET IMPACT AND LIQUIDITY COSTS

Front end sales loads, expense charges and other "hidden loads" are perceptible to the fiduciary seeking to evaluate investment costs. However, the trading practices required to implement the broker or professional trustee's investment strategies may generate significantly greater costs. The amounts of dollars flowing through trading systems are enormous, and have given rise to a controversial practice of "soft-dollar" rebates within the financial services industry.

One way to measure trading costs is to evaluate return differences between hypothetical and real portfolios. Portfolio strategies must be implemented in the real world, meaning funds must write some checks not charged to an index like the S&P 500. David J. Leinweber measured implementation shortfall by tracking return differences between the paper portfolio recommended by the Value Line rating service and the actual Value

²⁰ Sahu, A., Kleiman, R., & Callaghan, J., "The Timing and Stock Selection Abilities of Bank Funds: Evidence Based on Meta-

Analysis," *Journal of Financial Services Research* 13:2 (1998), pp. 137-152.

Line mutual fund that replicates the paper index. From 1979 to 1991, the Value Line paper index portfolio had a 26.2% annualized rate of return. The actual Value Line fund, however, earned a net after expense return of only 16.1% during the period.²¹ The difference between these two returns is a measure of (pre-tax) trading costs.

At first, it seems incredible that trading costs could cause a live portfolio's annualized returns to lag its index by 10.1% per year over a thirteen-year period. If there were no more to trading costs than institutional brokerage commissions and fund operating expenses, this differential would indeed be difficult to explain. However, as Wayne H. Wagner points out: "...many costs will be incurred long before the marketplace ever sees the order."²² Wagner's study measures a broad range of charges assessed against the portfolio by the financial markets in exchange for providing trading liquidity.

What does liquidity cost when it is in high demand (i.e., what does it cost to trade with the crowd)? Wagner and Edwards tracked 54,000 trades and found that brokerage commissions (the cost just to enter the order) paid per trade averaged 5.6 cents per share. When the trades reached the market, dealer/specialist bid-ask spread costs and market impact costs deducted an additional 12 cents per share. Finally, the cost of immediate execution (i.e., the cost of liquidity) deducted an additional 99 cents per share.²³ Commissions thus represent a small fraction of total trading costs. A decomposition of transaction costs for an average one-way trade for small company portfolios reveals a drag on portfolio performance from four areas:²⁴

- Commissions: 6 basis points
- Bid-Ask Spreads: 43 basis points
- Market-Impact Costs: 99 basis points
- Opportunity Costs: 28 basis points.

The above data suggests that, for a manager investing in the small company area with a 200% yearly turnover ratio (not uncommon for aggressive growth managers), total transaction cost, before management fees, equal 7.04%. Ironically, there is a future peril for the active managers who have been successful in overcoming the trading cost handicap so that they have, in the past, outperformed a comparable index. As these

managers attract funds from investors pursuing the "hot" track record, the market impact of each trade becomes higher and higher. The more successful the past track record, the more unlikely it becomes that future success can be achieved. By the time a manager achieves a national reputation as a portfolio manager expert, it may be mathematically impossible for him or her to continue to add value over the index: "If active managers understood their transaction costs, they would realize the impact of size on returns and concede that they cannot forever increase their business and honestly expect to generate positive added value."²⁵

The implications of large hidden trading costs are apparent. Buying highly recommended or popular stocks (momentum or trend buying) is extremely expensive; trading stocks frequently is also costly. Furthermore, recovering trading costs is difficult. Charles Ellis estimates that the operating costs of the average actively managed mutual fund amount to 1.6% per year. Over the long term, equity markets have provided a 6 percent premium over the risk-free return. Thus an active fund manager must do 26.7% better than the equity market just to recover costs.²⁶

For all these reasons, active fund managers, trying to outperform the market (that is, each other) face a daunting challenge. As Wagner states: "As a whole, active management performance falls short of index fund performance by between 100 and 150 basis points. Where does the money go? Into the frictional costs of getting security analysts' and portfolio managers' ideas into the portfolio."

Trading Costs

Brokerage Commissions (5.6 cents)

Spread Costs/Market Impact (12 cents)

Immediate Execution Costs (99 cents)



²¹ Leinweber, David J., "Using Information from Trading in Trading and Portfolio Management," *Execution Techniques, True Trading Costs, and the Microstructure of Markets* ed. K.F. Sherrerd (AIMR, 1993), pp. 25-26.

²² Wagner, Wayne H., "Defining and Measuring Trading Costs," *Execution Techniques, True Trading Costs, and the Microstructure of Markets* ed. K.F. Sherrerd (AIMR, 1993), p. 15.

²³ Wagner, W. H., & Edwards, M., "Best Execution," *Finan-*

cial Analysts Journal (January/February, 1993), pp. 65-71.

²⁴ Wheeler, Langdon B., "The Value of Added Value: The Smaller Active Manager's Approach to the Future," *The Future of Investment Management* ed. K.F. Sherrerd (AIMR, 1998), p. 52.

²⁵ *Ibid.*, p. 56.

²⁶ Ellis, Charles D. *Investment Policy*, Irwin (Chicago, 1993), p. 9.

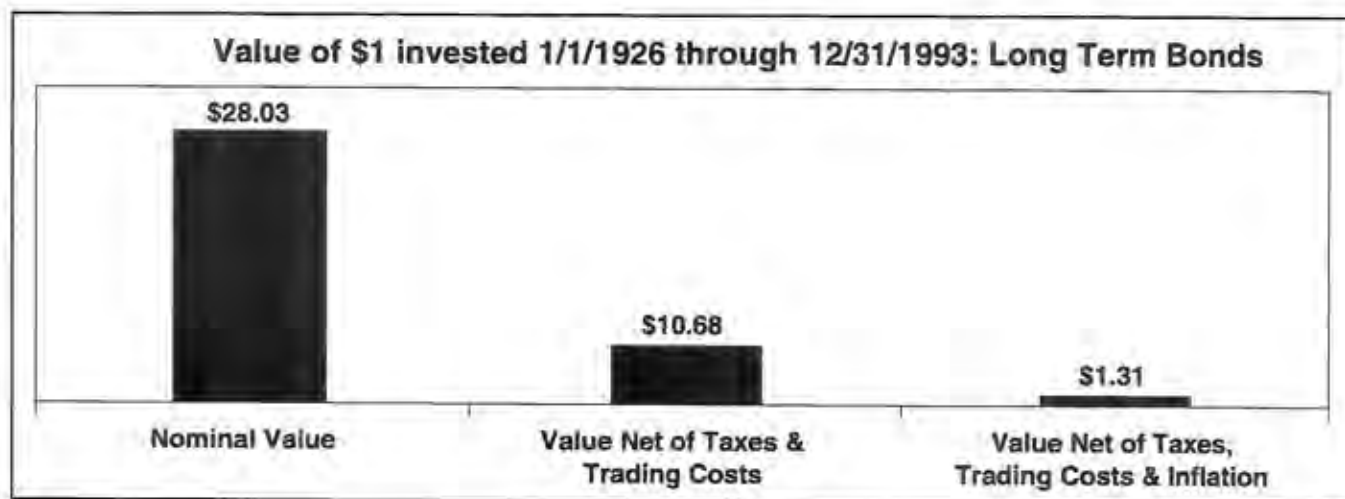
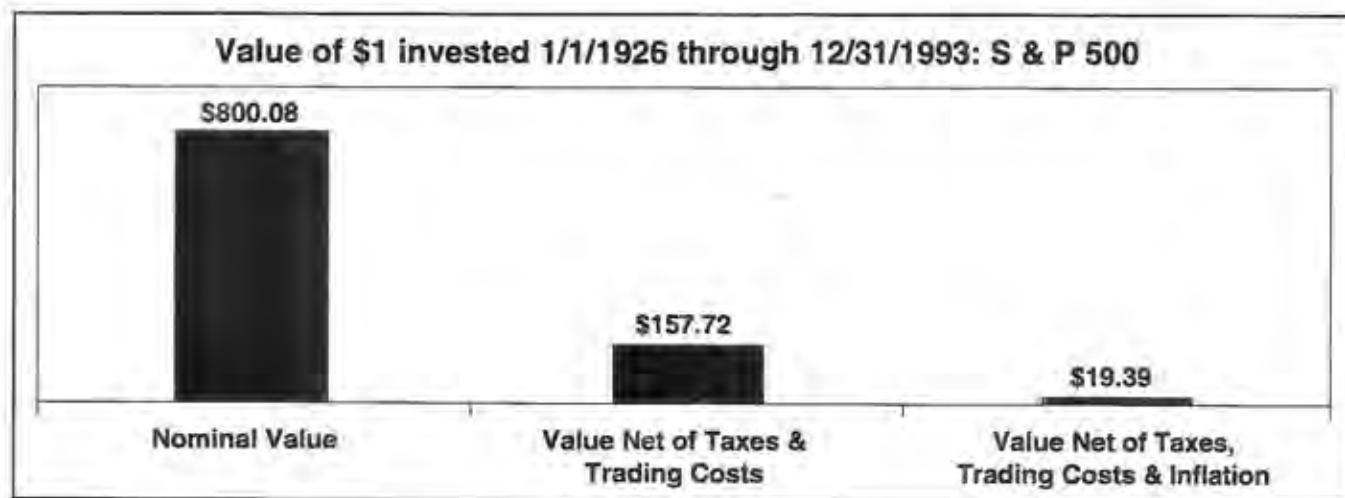
TAXES, INFLATION AND TURNOVER

For taxable investors, high portfolio turnover increases maintenance costs, since trading activity often triggers taxable events. The prudent fiduciary must consider the combined impact of trading costs, taxes, and inflation. These three costs erode returns.

"Why aren't we all rich?" This sentence is the intriguing beginning to a study by Siegel and Montgomery that appeared in the winter 1995 edition of *The Journal of Portfolio Management*.²⁷ The authors examined the long term investment results of several asset classes during the period 1926 through 1993, in order to gauge the effect of taxes, inflation and trading costs on overall portfolio return.

For trading costs, the authors used commission costs only. To calculate taxes they assumed a single

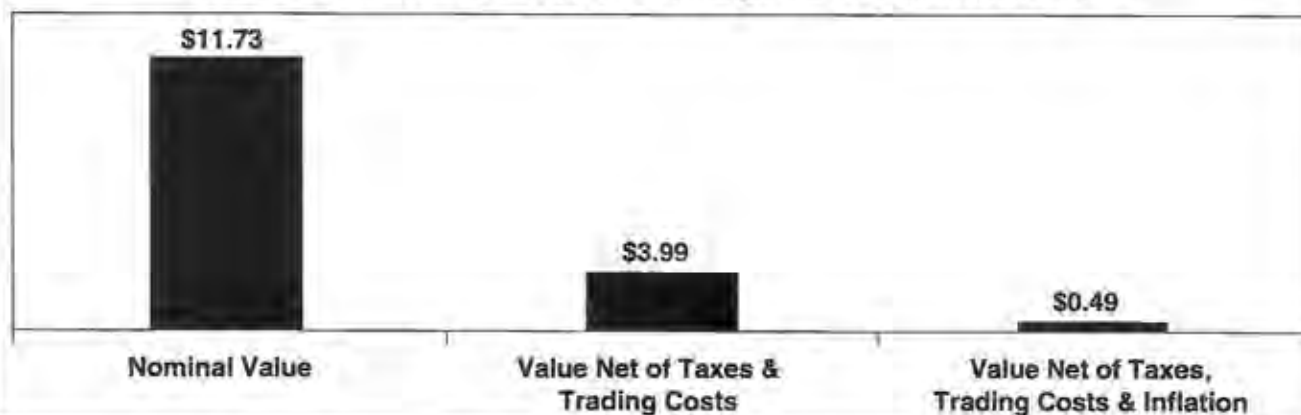
taxpayer with \$75,000 of earned income measured in 1989 dollars. Earned income from 1989 through 1993 is increased each year by the rate of inflation; earned income from 1988 back through 1926 is discounted by the rate of inflation applicable to each calendar year. These adjustments generate a constant-dollar earned income level throughout the period under evaluation. All inflation adjustments are based on the historical CPI. Additionally, they apply the actual (i.e. historical) year-by-year marginal income tax rates on both capital gains and ordinary income (in 1926 income taxes were 1%, and capital gains taxes were 6%). They assume 20% portfolio turnover per year. Finally, they inflation-adjust results to determine realized purchasing power per dollar invested. The graphs below and on page 134 depict the extent to which taxes and expenses erode portfolio value:



²⁷ Siegel, S.B., & Montgomery, David, "Stocks, Bonds, and Bills after Taxes and Inflation," *The Journal of Portfolio Manage-*

ment (Winter, 1995)pp. 17-25.

Value of \$1 invested 1/1/1926 through 12/31/1993: U.S. T-Bills



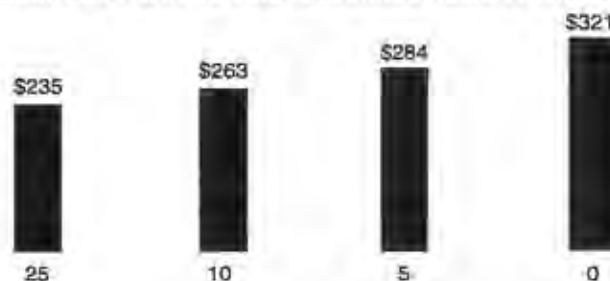
These findings are indeed sobering. Moreover, the unsophisticated fiduciary must understand utilization of statistics by professional trustees or investment managers may be nominal rather than actual. Remember, however, that the tax cost calculations assume a 20% per year portfolio turnover (i.e., the average security is retained in the portfolio for five years). Such assumptions are unrealistic. By mutual fund industry standards, 20% is a low rate of turnover. A query of the Morningstar mutual fund database as of March 31, 1997 reveals that the average mutual fund turnover rate for the categories most comparable to the S&P 500—"Growth & Income Stock Funds" and "Large Company Stock Funds"—were 64% per year and 70% per year, respectively.

How does frequent trading activity (i.e., high portfolio turnover rates) affect return? Koontz began his study of the question by citing the well-known Brookings Institution study of the structure and performance of the U.S. money management industry, published in 1992.²⁸ The Brookings study examined pension plans (i.e., non-taxable investors) and concluded that passive, indexed portfolios... "outperformed the active portfolios by 42 basis points when compared over 6-month periods from 1985 to 1989 and by 78 basis points when compared over 12-month periods." These results were calculated after adjusting for the active portfolios' cash positions, but before management fees.

What, then, is the relationship between active trading and tax costs? The longer the holding period of the average security, the longer the tax event of a sale can be postponed: "The longer the gains remain unrealized, the more valuable they are, because deferred taxes on unrealized gains compound for the investor instead of Uncle Sam." Ending wealth was calculated based on various

turnover rates for a portfolio held for twenty years by an investor with an assumed combined federal and state capital gains tax rate of 35% and a growth rate of 6%:

20th Year Portfolio Value at Various Rates of Turnover



The tax marginal impact was highest at the lowest turnover levels: "in actuality, a manager with 25% turnover has paid more than 80% of the taxes that would be paid by a manager with 100% turnover." If trading activity increases from zero percent to five percent, the terminal portfolio value declines by 12%. However trading activity increases from fifty percent to fifty-five percent, the terminal market value drops by just 0.5%. Shortening the portfolio holding periods triggers tax costs. But the impact on the length of the holding period is greater at relatively low turnover rates. Moving from zero to five percent turnover decreases the holding period from more than 100 years to 20 years (a factor of 5); while moving from 50 percent to 55 percent turnover rate decreases the holding period from two years to 1.8 years (a factor of 1.1). By the time you reach fifty-percent turnover, most of the tax damage has already been done.

²⁸ Koontz, Warren N., "Understanding the Tax Constraints on Private Clients," *Investment Counsel for Private Clients* (AIMR,

1993) pp. 65-71.

Koontz then calculated how much returns will be reduced by tax costs triggered by trading activity in his 20 year model:

- 5% turnover rate equates to a 0.64% reduction in annual returns;
- 10% turnover rate equates to a 1.05% reduction in annual returns;
- 25% turnover rate equates to a 1.63% reduction in annual returns;
- 50% turnover rate equates to a 1.93% reduction in annual returns.

Koontz tentatively concluded that passive (low turnover) portfolios have considerable advantages for taxable investors.

To test this conclusion, he then compared before and after tax results of all 72 actively managed growth and growth and income mutual funds (with at least \$100 million of assets) over the period 1982 through 1991 to results from the Vanguard S&P 500 Index mutual fund. For the ten-year period, he checked results on a pre-tax basis; on an after-tax basis before selling the fund; and, on an after-tax basis after selling the fund (selling the fund triggers immediate tax recognition on all unrealized capital gains accumulated during the investment period). Results for the 72 funds were as follows:

Funds Beating Vanguard Index²⁹

Pre-Tax	After-Tax (Pre-Sale)	After-Tax Basis (Post-Sale)	After-Tax (with Statistical Significance)
15	5	10	2

Koontz concluded that the odds of picking an actively managed fund that beats its benchmark index are slim: "...an active manager must add substantial excess return, even at very low levels of turnover, to justify trading in a taxable portfolio."

CONCLUSION

Comprehensive evaluation of investment expenses is a complex task. Most professional trustees and investment managers advertise (and most unsophisticated fiduciaries expect) that they constantly research the market in order to provide appropriate securities. For the conservative investor, appropriate securities may be low-risk, "blue-chip" stocks and bonds; for the more aggressive investor, appropriate securities may be undervalued stocks that exhibit strong potential for attractive future capital appreciation—securities that will "beat the market." In either case, in order for active management to more easily justify fees, there is a strong incentive to create the appearance of doing lots of stuff. Research departments conduct security analysis, portfolio management departments make buy and sell decisions, trading departments execute recommended transactions, accounting departments calculate income and capital appreciation, and so forth. The fiduciary must determine if explicit charges and fees are reasonable and appropriate; and, perhaps more important, must determine if active investment management strategies provide the expectation of returns sufficient to compensate for the added risks and costs. Even if such a determination can be made, the fiduciary must then assess the probable tax results of high-turnover active manager strategies (stock picking and market timing). The choice of active vs. passive investment portfolios goes to the heart of the issues of fiduciary responsibility. High costs and heavy taxes may overwhelm the benefits promised by the fund manager, stockbroker or trust officer. Crucial to the entire experience is the need for detailed fiduciary records that can demonstrate compliance with the mandates of prudence in investment strategy and in the "costs of the investment strategy."

Other observers reach similar conclusions. Commentators within the legal community argue that index funds represent the best mechanism for demonstrating compliance with requirements imposed by the Prudent Investor rules and cost containment.³⁰ However, the argument may fail where index funds include a broad range of expense and commission structures. Hence, a simplistic adoption of an indexing

²⁹ The top two funds were CGM Capital and Fidelity Magellan. Fidelity Magellan has underperformed the S&P 500 by an annualized rate of 3.57% for the five year period ending 12/31/98; CGM Capital has underperformed by an annualized rate of 10.6% over the same period.

³⁰ See for example Simon, W. S., "Index Mutual Funds: The Best Investment Strategy for Complying With the California Uniform Prudent Investor Act," *Estate Planning & California Probate Reporter* (June, 1998).

strategy without independent review, scrutiny and determination that the selected index funds are appropriate choices would not appear to satisfy the new fiduciary standards implemented by the Uniform Prudent Investor Act.

Finally, the evolving standards of prudence may result in the evaluation of fiduciaries along at least two dimensions. The first is performance relative to applicable benchmarks or indices (i.e. investment policy); the second is cost containment relative to

expenses of alternative trust administrative and investment choices. Current academic research underscores the fact that cost containment over a multi-period planning horizon is crucial to investment success. The fiduciary who delegates investment decisions to professional trustees and money managers must document reasonable care skill and caution in the vendor selection process. For a benchmark on costs ignoring market impact and liquidity costs and taxes, turnovers and inflation see Appendix A.

**APPENDIX A: INVESTMENT COSTS:
SELECTED PASSIVELY MANAGED MUTUAL FUNDS VS. FUND CATEGORY AVERAGES**

The following table illustrates the magnitude of possible cost savings by employing no-load, low-cost, passively managed mutual funds.

Fund	Morningstar Investment Category	Fund Expense Ratio	Category Expense Ratio	Fund 12b-1 fee	Category 12b-1 fee*	Fund front-end load	Category front-end load	Fund Deferred Sales Charge	Category Deferred Sales Charge
Vanguard S&P 500 Index Trust	US Large "Blend"	0.19%	1.26%	0%	0.36%	0%	1.27%	0%	0.88%
DFA US Small Co. Portfolio	US Small "Blend"	0.60%	1.51%	0%	0.34%	0%	1.29%	0%	0.78%
Schwab International Index	Foreign Stock	0.61%	1.66%	0%	0.88%	0%	1.17%	0%	0.88%

*12b-1 fees are one component of a fund's expense ratio. Expense ratios do not include commissions paid for trading activity.

Information from Morningstar Data Base as of 7/31/98.