



VOLUME 28, NUMBER 3

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JOURNAL *of*
PENSION
PLANNING &
COMPLIANCE

Editor-in-Chief: Bruce J. McNeil

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Dorsey & Whitney LLP

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Real Estate Stocks, Correlation, and the ERISA Prudence Rule

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Although possession is said to be nine-tenths of the law, in the world of pension plan investing asset allocation has an equal if not more distinguished rank. In his widely regarded 1986 paper, investment manager Gary Brinson opined that asset allocation decisions explain over 90 percent of the variation in plan return.¹ A key element of the asset allocation process, and a mainstay of modern portfolio theory since Markowitz,² has been the need to predict the statistical relationships between asset class returns, more technically known as correlation coefficients. Low asset class correlation, or covariance, is the primary means of reducing portfolio risk relative to expected return. Modern portfolio theory holds that an optimal portfolio may be designed through analysis and projection of expected return, volatility, and covariance of asset classes.

Today, pension plan managers (or at least defined benefit plan managers) spend considerable time searching for that elusive “efficient frontier” of optimal asset class allocation. Indeed, faced with short-term volatility in the global public equity markets, many managers recognize the increasing importance of a portfolio constructed with blocks of relatively poorly correlated assets.³

1. See Brinson, Hood, Beebower, “Determinants of Portfolio Performance,” 42 *Fin Analysts J* 4.

2. Markowitz, “Portfolio Selection,” 7 *J of Finance* 2; Markowitz, *Portfolio Selection: Efficient Diversification of Investments* (John Wiley & Sons, 1959).

3. While pension managers necessarily construct asset allocation models focusing on long-term investment, the practical reality is that they operate in an extremely competitive business environment, and just a few years of poor portfolio performance often results in management changes. The

The federal law that guides private-sector pension plan management, the Employee Retirement Income Security Act of 1974 (ERISA), as amended,⁴ encourages the use of modern portfolio construction concepts. U.S. Labor Department regulations and pronouncements governing prudent investment conduct adhere to modern portfolio theory principles, and courts hearing cases under ERISA involving investment managers have, by and large, rejected the constraint of measuring prudence by evaluating investments in isolation.

The appropriate use of real estate in portfolio design has, however, mystified pension managers. Real estate seems much like a young baseball pitcher with “great stuff” but a wild and erratic arm: the front office recognizes his promise, but can’t predict how well he’ll perform nor determine his role on the staff. On the one hand, portfolio managers have long understood real estate’s promise of a strong hedge against inflation, the value of rental income on liquidity needs, and the prospect of better returns than other “equity diversifiers.” But the ability to measure real estate volatility is perceived to be low due to the infrequency and inefficiency of appraisals, and correlation coefficients are suspect in view of, *inter alia*, the lag effect between appraisals and truer capital market pricing.⁵

Yet help appears to be on the way, in the form of real estate securities. Publicly traded real estate investment trusts (REITs) have grown dramatically over the last ten years, so that we now have a significantly large, liquid public equity capital market for real estate. REIT index funds and a variety of mutual funds specializing in REIT investment also have been created, allowing the 401(k) market to offer attractive, passive real estate investment. The size and maturing of the REIT industry now enables investors to predict volatility and covariance with a greater degree of reliability, and REIT marketability makes it particularly attractive for pension plans because of the efficiency it affords in portfolio rebalancing.

Perhaps most interesting, according to a recent study by Ibbotson Associates, REIT performance shows low correlation coefficients with other stocks and bonds.⁶ The results are important because, given that

current uncertainty surrounding global equity capital markets is causing many pension advisors to give greater consideration to asset class covariation, particularly in order to reduce downside portfolio risk.

4. 29 USC § 1001, *et seq.*

5. See, *eg.*, Kaiser, “Using Capital Markets’ Value Cycles in Allocating to Real Estate vs. Stocks or Bonds,” *J of Real Estate Portfolio Mgmt*, Winter 1999.

6. See “REIT Presentation,” Ibbotson Associates, 2001. The REIT Correlation Analysis, consisting of 37 slides and a review of the REIT Industry, is available from Ibbotson Associates at its website, www.ibbotson.com. Hereinafter, “Ibbotson Study.”

publicly-traded REITs are priced consistent with standard capital market pricing tools, one might predict that REIT price variance would have a relatively high correlation to other equities (i.e., large caps stocks, small caps stocks, etc.), or at least a higher correlation than traditional direct real estate (to the extent reliable variance and correlation coefficients can even be developed). But the low correlative impact of REITs *vis-à-vis* other publicly-traded equity or debt, without the “lumpy” features of traditional real estate, in fact makes it a particularly attractive asset class for defined benefit and 401(k) plans.

This article examines the appropriateness of REIT securities in diversifying pension portfolios from a legal context. It discusses ERISA’s prudence and diversification requirements, surveys applicable regulatory guidance and case law, and discusses how inclusion of REITs in defined benefit and 401(k) portfolios enhances ERISA fiduciary compliance. It argues that an ERISA fiduciary’s inclusion of REIT securities following specific consideration of their correlative effect reduces the legal risk that either the REIT investment, or other, low-correlated asset classes, would be deemed too volatile or risky to be prudently included in the pension portfolio. It also argues that, despite some case law to the contrary, the “anti-netting” rule of pre-ERISA trust law should not apply when determining loss for imprudent ERISA investment, at least if a fiduciary has carefully considered the covariance of REITs with other portfolio asset classes.

These principles have application in both defined benefit and 401(k) plans. Indeed, the article suggests that in the 401(k) environment, plan fiduciaries are more susceptible to legal claims of imprudence in connection with loss under a specific investment option, and that examination of investment option correlation and inclusion of low-correlated options like REITs enhances a fiduciary’s prudence position.

ERISA’S PRUDENCE AND DIVERSIFICATION RULES

The primary statutory rule governing the conduct of ERISA pension plan fiduciaries is the prudence requirement of ERISA Section 404(a)(1)(B) which requires a plan fiduciary to act with the “care, skill, prudence and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.” The legislative history of ERISA, and numerous appellate decisions, have noted that ERISA’s prudence standard was derived from the common law of trusts, but that it was to be applied in light “of the special

nature and purpose of employee benefit plans.”⁷ Common law trust treatment of prudence should not apply exactly in the context of pension plan investing.⁸

The ERISA standard for prudent investment conduct focuses on the process undertaken at the time the challenged investment is made. Procedural prudence is the primary inquiry; not the success or failure of the investment. The test is whether, at the time the fiduciary engaged in the investment transaction, the fiduciary “employed the appropriate methods to investigate the merits of the investment and to structure the investment.”⁹

ERISA also contains an express diversification rule. Section 404(a)(1)(D) requires ERISA fiduciaries to “diversify . . . the investment of the plan so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.” Under this rule, once a plaintiff proves a failure to diversify, the burden shifts to fiduciaries to justify such failure as prudent.¹⁰ Consequently, ERISA’s asset diversification requirement is largely indistinct from the duty to act prudently, except that in the diversification context the burden to show prudence is imposed on the fiduciary rather than the plaintiff.

On their face, these statutory requirements do not prescribe standards for prudent behavior and do not embrace covariation analysis as an important tool in prudent investment inquiry. But key regulatory pronouncements of the Department of Labor and the developing case law do.¹¹

7. *See, eg*, *Donovan v Mazzola*, 716 F2d 1226, 1231 (9th Cir 1983); *Donovan v Cunningham*, 716 F2d 1455 (5th Cir, 1983); *see also* HR Rep No. 1280, 93 Cong, 2 Sess (1974) (ERISA Conference Report).

8. *See Laborer’s National Pension Fund v Northern Trust Quantitative Advisors, Inc*, 173 F3d 313 (5th Cir 1999).

9. *See, eg*, *Donovan v. Mazzola, supra*, 716 F2d at 1232; *see also* *Roth v Sawyer-Cleator Lumber Co*, 16 F3d 915 (8th Cir 1994); *Katsoros v Cody* 744 F2d 270 (2d Cir), cert denied, 469 US 1072 (1984); *Fink v National Sav & Trust Co*, 772 F2d 951 (DC Cir 1985). This is not to say that courts always avoid ruling on the substantive merits of the investment. For some judges, the key is whether a hypothetically prudent investor would have made the decision notwithstanding the due diligence conducted at the time of the investment. *See, eg*, *Fink v National Sav & Trust Co*, 772 F2d at 962 (Scalia, concurring and dissenting); *see also* *Donovan v Tricario*, 5 Empl Ben Cases 2057, 2064 (SD Fla 1984) (procedural and substantive prudence separate, independent bases for finding imprudent conduct). But by and large, courts are content with the assumption that an adequate investigation, *ex ante*, will reveal whether an investment is improvident, so it is enough to review the adequacy of the fiduciary’s investigation and not substitute an *ex post* legal judgment about investment merits. *See Kuper v Iovenko*, 66 F3d 1447 (6th Cir 1995).

10. *See* *California Ironworkers Field Pension Trust v Loomis Sayles Co*, 259 F3d 1036 (9th Cir 2001); *Metzler v Graham*, 112 F3d 207 (5th Cir 1997); *Reich v King*, 867 FSupp. 341 (D Md 1994).

11. The US Labor Department is the regulatory agency charged with enforcement responsibility over the fiduciary provisions of ERISA. *See, eg*, 29 USC § 1134, 1135.

In 1979, the Labor Department promulgated a crucial regulation prescribing rules for prudent conduct in regard to investment activities by an ERISA fiduciary (Prudence Regulation).¹² Mindful of the “special nature and purpose of employee benefit plans” relative to other forms of trusts, the Prudence Regulation implicitly gives its imprimatur to covariance analysis. In pertinent part, it provides that the prudence requirements of ERISA Section 404(a)(1)(B) are satisfied if a fiduciary “[h]as given appropriate consideration to those facts and circumstances that . . . the fiduciary knows . . . are relevant to the particular investment or investment course of action involved, including *the role the investment or investment course of action plays in that portion of the plan’s investment portfolio with respect to which the fiduciary has investment duties.*”[Emphasis added.]

The regulation further provides that “appropriate consideration” shall include:

- A determination by the fiduciary that the particular investment or investment course of action “is reasonably designed,” as part of the portfolio or portion with respect to which it has investment duties, “to further the purpose of the plan, taking into account the risk of loss and the opportunity for gain”;
- Consideration by the fiduciary of the composition of the portfolio, or portion with respect to which it has investment duties, with regard to diversification;
- Consideration by the fiduciary of the liquidity and current return of the portfolio relative to the anticipated cash flow requirements of the plan; and
- Consideration by the fiduciary of the projected return of the portfolio relative to the funding objective of the plan.

Thus, the Prudence Regulation encourages, as part of the prudent investment inquiry, employment of the key pieces of modern portfolio theory: consideration of projected risk and return on assets relative to overall plan objectives (e.g., cash flow), and more crucially, risk/return consideration relative to the “role” such consideration plays in connection with other assets or asset classes.¹³

12. See 29 CFR § 1550.404a-1.

13. Consistent with the Prudence Regulation, in 1994 the Labor Department issued ERISA Interpretive Bulletin 94-2 governing statements of investment policy. See 29 CFR § 1509.94-2. The Bulletin encourages benefit plans to develop statements of investment policy that set forth guidelines for investment decision-making. While it does not indicate that such statements need always address asset allocation and asset class covariance, it does provide that investment statements should “take into account factors such as the plan’s funding policy and liquidity needs, as well as issues of . . . diversification.”

A recent and further indication of Labor Department imprimatur for asset class covariation analysis arose in 1996, in connection with a Labor Department Guidance Letter on derivatives.¹⁴ There, the Department stated that, in determining whether to invest in a particular derivative instrument or derivative portfolio, plan fiduciaries are required to engage in a process that would include “consideration of how the investment fits in with the plan’s investment policy, the role the particular derivative plays in the plan’s portfolio, and the plan’s potential exposure to loss.” It is worth observing that the Labor Department focuses on a plan’s potential for loss, and not merely the isolated risk of loss associated with the particular derivative asset or asset class.

The most complete judicial embrace of covariation analysis and modern portfolio principles as a demonstration of prudent conduct under ERISA is the Fifth Circuit’s 1999 decision in *Laborers Pension Fund v. Northern Trust Quantitative Advisors*.¹⁵ *Laborers Pension Fund* involved an investment of 6.5 percent of a fixed income fund in interest-only mortgage securities (IO). The IOs were sold a year later at a 38 percent loss, but the fixed income portfolio as a whole earned 6 percent for that period. The court noted that under traditional trust law, the riskiness of each investment must be held in isolation,¹⁶ but ruled that ERISA’s prudence requirements, as interpreted by the Labor Department’s Prudence Regulation, had rejected such approach in favor of the modern portfolio theory.

The court observed that, prior to making the investment, the manager had conducted stress simulation tests that projected the performance of the IOs and the rest of the fund’s fixed income portfolio under different market interest rate conditions. The court concluded that the investment had been intentionally and reasonably designed “to further the purposes of diversification *as a hedge against* possible interest rate hikes and *consequent declines in values of fixed income securities*” in the remainder of the fund. [Emphasis added.] Moreover, it expressly criticized the lower court for its comment that “it does not matter that . . . the portfolio as a whole made an adequate return,” holding that such a judgment was erroneous in light of modern portfolio concepts required by ERISA.¹⁷

14. See “Letter of Guidance and Statement on Derivates,” reprinted in 23 *BNA Ben Rptr* 1046 (Mar 28, 1996).

15. 173 F3d 313 (5th Cir 1999).

16. 173 F3d at 315 n1, citing *Chase v Pevear*, 419 NE2d 1358 (Mass 1981); In re *Bank of New York*, 323 NE2d 700 (NY 1974).

17. *Id.* at 316-17. The modern portfolio concept of covariation was *also* given court imprimatur in *Chao v Moore*, 2001 WestLaw 743204 (D Md 2001). See *also* *Sandival v Simmons*, 622 FSupp

Last year (2001), another appeals court applied covariation concepts in analyzing the prudence of another “exotic”-inverse floaters. In *California Ironworkers Field Pension Trust v. Loomis Sayles & Co.*,¹⁸ the Ninth Circuit ruled that an investment manager did not act imprudently in investing in inverse floaters for two pension trusts. The court recognized that inverse floaters were volatile investments, obviously sensitive to interest rates, but noted that at the time of the investment the manager had modeled the effect of the investment under different interest rate scenarios and that expert testimony had indicated that the percentage of assets allocated to inverse floaters was appropriate for each trust, taking into account its objectives and other asset classes. Accordingly, the court affirmed a decision that the managers acted prudently.¹⁹

These recent acknowledgements of portfolio theory are consistent with the initial embrace of the theory in *Leigh v. Engle*.²⁰ The *Leigh* court acknowledged that a prudent, diversified, ERISA-regulated portfolio should balance levels of risk and return across investments, “neutraliz[ing] [the risk] of a given investment . . . when the investment is combined with others in a diversified portfolio.” It recognized that overall portfolio risk should be less than that for certain assets within a portfolio, and that “plan beneficiaries whose assets are being managed *should be concerned with the end result of that strategy, not with the return of a single element in the portfolio.*”²¹ The court held that in calculating damages for imprudent ERISA investments, a court should focus on the end result of the strategy and not with the return of a single element, or even asset class, in the portfolio. Thus, courts should look at the whole portfolio to determine “the investment strategy’s success.”²²

1174 (CD Ill 1985) (prudent diversification should be judged based on the entire portfolio composition rather than by the assets of a particular sub-fund).

18. 159 F3d 1036 (9th Cir 2001).

19. The manager’s victory was not, however, complete. It had also invested 30 percent of a related health and welfare fund’s assets in inverse floaters. Here the court affirmed a finding that such an investment was imprudent, but its holding was based on a determination that the size of the investment violated the “conservative” terms of the fund’s investment policy. ERISA Section 404(a)(1)(D) generally requires fiduciaries to follow the terms of governing pension plan documents, and the court’s decision is better understood as a violation of that rule.

20. 858 F2d 361 (7th Cir 1988).

21. *Id.* at 366 (emphasis added).

22. Two other well-known fiduciary investment decisions, *GIW Indus v Trevor, Stewart, Burton & Jacobsen, Inc.*, 895 F2d 729 (11th Cir 1990) and *In re Unisys Savings Plan*, 74 F3d 420 (3d Cir 1996), would appear, at first blush, to reject the view that prudence and diversification may be judged by analyzing the relationship of the challenged investment to other portfolio assets. But in both cases there was no evidence that the existence of the other asset classes had influenced the manager’s conduct. In other words, the courts found no reason to “reward” the investing fiduciary by examining post facto whether the challenged investment was well correlated to other portfolio investments, if the investing fiduciary had not done so ex ante.

Although *Leigh's* discussion of portfolio theory was in connection with damages calculations for fiduciary misconduct, it should have equal application in the determination of prudence. Courts should not be concerned with investment-specific volatility or risk, because the more crucial question is whether investments have a low correlation with other asset classes, so that collectively the portfolio is less volatile. In the pension context, where a stable long-term return is generally the objective, the volatilities of individual investments are only important to their impact on the volatility of the whole portfolio, and should be so tested in evaluating the prudence of making and holding them.²³ It makes no sense for courts to dub a pension investment as imprudently risky or speculative if the investment risk is specifically intended to be reasonably balanced within the overall portfolio scheme, and stable returns consistent with systemic market risk are available over the long-term. In light of the procedural prudence approach to ERISA Section 404(a)(1)(B), that is particularly true when the investor has in fact analyzed the portfolio covariance of an investment strategy.

Indeed, although the developing ERISA case law has not yet arrived at the point, because acceptability of risk should lawfully be determined on a portfolio basis, the manager's knowledge of those elements of specific investment risk immaterial to portfolio risk should not be legally significant. To be sure, knowledge of investment-specific volatility ordinarily will be necessary to determine positive or negative correlation with other portfolio assets, and thus acceptable portfolio risk. But one can posit situations in which the investor fails to understand or even learn of elements of investment-specific risk, yet undertakes sufficient effort to analyze co-relationships between an investment and other asset classes. That is to say, not all investment-specific risk is relevant to the determination of portfolio risk. Failure to understand the former should not be relevant to the prudence of the investor's conduct. Moreover, focusing a legal determination of prudence on portfolio risk rather than specific investment risk also achieves sound policy objectives, because it empowers ERISA fiduciaries to be creative in crafting methods to increase overall return with less overall risk which, after all, is the ultimate trust objective.

If such principles were not to apply to determine prudent ERISA fiduciary conduct, they surely should apply in connection with damages calculation for imprudent conduct. The old anti-netting rule of the com-

23. See B Longstreth, "Modern Investment Management and the Prudent Man Rule," 82-84 (Oxford Univ Press, 1986).

mon law of trusts should have little application under ERISA.²⁴ The seminal decision on calculating damages for imprudent ERISA fiduciary conduct, *Donovan v. Bierwirth*,²⁵ is not to the contrary. *Bierwirth* holds that the measure of benefit plan damages is the profit that would have accrued to the trust in the absence of the improvident conduct that caused the breach. Opportunity cost is, therefore, included in the measure of damages. This quite general rule does not necessarily preclude netting of other portfolio profits.²⁶ The rule simply raises the question of what should be deemed the “conduct” or “opportunity” from which one measures the loss. Similar to the reasoning expressed above, if the investor’s conduct in connection with an investment that results in loss was taken with an eye toward the investment’s place in the entire portfolio, or with an eye toward other specific, low-correlated asset classes in the portfolio, then broader portfolio performance should be taken into account to determine loss.

This is the approach of the *Leigh* court,²⁷ and implicitly the approach indicated in *Laborer’s National Pension Fund*²⁸ when it criticized the lower court’s finding that the adequacy of *portfolio* return was “irrelevant” to determining the prudence of a mortgage security investment strategy. Indeed, assume a pension manager invests in General Electric. No one would say that the investor will be liable for losses in GE’s NBC division if GE common stock trades higher: there is no investment loss. Similarly, assume a manager invests in a publicly traded REIT concentrating on office properties across diverse geographic regions. Some office properties may incur losses, but the overall REIT portfolio performs well and its securities rise in value. The law does not see through the investment. The investor has made but a single investment, and again, the investor has not suffered loss. Similarly, if a pension investor has examined the role of a particular investment in the overall portfolio (or the portion of the portfolio for which it has discretion), and the investor concludes the investment offers a fair return with low correlation to other asset classes, the investor should not be surcharged for that

24. See *Restatement (Second) of Trusts*, § 213, comments a and f.

25. 754 F2d 1049 (2d Cir 1985).

26. Indeed, several courts have held that if only a portion of an investment is improvident, the measure of loss is only on that portion and not the entire challenged investment. See *GIW Indus, Inc v Trevor, Stewart, Burton & Jacobsen, Inc*, 895 F2d 729 (11th Cir 1990); *Bruner v Boatmen’s Bank*, 918 FSupp 1347 (D Mo 1997).

27. It should be noted that the *Leigh* court restricted its damages rule to cases of imprudent conduct, and not to cases in which the investor acted disloyally and in service of its own interests.

28. See text at n17, *supra*.

investment's loss if overall portfolio performance (or the portion for which covariance is examined) shows a net gain.²⁹

It is also important to comment on 401(k) plans and the purported exemption from fiduciary liability provided those and other forms of individual account plans under ERISA Section 404(c). Self-directed 401(k) plans have exploded in number and in dollars invested in the decade of the 1990s.³⁰ ERISA Section 404(c) provides that in cases of self-directed individual account plans, where the participants in fact exercise control over their account assets, "no person who is otherwise a fiduciary shall be liable . . . for any loss, or by reason of any breach, which results from such . . . exercise."

At first blush, the exemption would appear quite broad, but it has been considerably narrowed by Labor Department regulations.³¹ Significantly, the Labor Department predicates application of Section 404(c) on the prudent and otherwise lawful selection of investment options, and prohibits 404(c) relief for those *a priori* fiduciary decisions. The sparse case law interpreting 404(c) is in accord with that position.³² Section 404(c) accomplishes little more than to shield 401(k) plan fiduciaries

29. The current restatement of the common law of trusts does not conflict with such an analysis. Section 213 of the *Restatement (Third) of Trusts* provides that a trustee who is liable for loss may not reduce the liability "by deducting the amount of profit that accrued through another and distinct breach." But it also states that if the breaches "are not separate and distinct" the trustee "is accountable only for the net gain or chargeable only with the net loss." Moreover, comment f to Section 213 provides that among the factors that should be considered in determining whether two or more breaches are separate or related are whether the breaches "are the result of a single policy, judgment, or set of interrelated decisions." It would be implausible for the law to recognize a netting right among two or more related *breaches* of trust, but not among two or more equally related decisions only one of which is a breach. Such a rule would reward the malfactor for the multiplicity of its misdeeds. The key should be whether a bundle of investment decisions are distinct, or instead result from "a single policy, judgment, or set of interrelated decisions." If the latter, then it is eminently appropriate to allow netting among two or more investment decisions. *See generally* Gordon "The Puzzling Persistence of the Constrained Prudent Man Rule," 62 *NYU L Rev* 52 (1987) (arguing that Section 213 can be construed consistent with modern portfolio theory). This approach, unfortunately, was recently rejected by the Ninth Circuit in *California Ironworkers Field Pension Trust* 159 F3d at 1047-48, but the court's reasoning is flawed.

30. *See* "401(k) Day: A Celebration of Success," Profit Sharing/401(k) Council Press Release (Sep 1, 2001) (estimating that as of 2000, there were 40 million participants in 340,000 401(k) plans, and that 97 percent of the plans were self-directed), press release available at Profit Sharing/401(k) Council website, psca@psca.org. In a self-directed plan, the employer/sponsor, typically aided by an outside fund vendor and sometimes an investment advisor, chooses and makes available to employee participants a menu of mutual fund or insurance company investment products. The participating employees construct a portfolio from the menu options for their respective individual pension accounts, and both employee and employer contributions are invested consistent with the participant's investment elections. The value of the participating employee's pension account hinges on the investment performance of the chosen options, which of course may be changed.

31. 29 CFR § 2550.404c-1.

32. *See In re Unisys Sav Plan Litigation*, 74 F3d 420 (3d Cir 1996).

from a participant's failure to diversify. As a practical matter, the employer or other fiduciary that selects the investment menu is likely to find itself duty bound to act prudently in identifying and constructing an asset class option set that offers individual plan participants most of the same investment choices and core diversification opportunities generally available to professional managers of traditional defined benefit plans. It should afford each participant the opportunity to construct a well-diversified portfolio that, on a portfolio-wide basis, contains acceptable, low-correlated risk and the prospect of stable returns over the long-term.³³

In reality, the 401(k) fiduciary's task fairly mirrors that of the defined benefit plan trustee. The 401(k) fiduciary should develop the same "efficient frontier" of optimal asset class allocations as the defined benefit plan trustee, focusing particularly on low asset class correlation and covariance, and should identify fund options within each class. It is then up to the individual participant to act reasonably upon this effort. Ironically, however, the risk of regulatory scrutiny or litigation for the 401(k) fiduciary's failure to do so is probably greater than that of the defined benefit plan investor. The simple fact is that defined benefit plan returns tend to be reported, at least to participants, on a portfolio basis, and because all assets are available to support each individual participant's pension, there is an appropriate mindset to focus on overall portfolio performance when considering the fortunes of the plan.

In the 401(k) environment, however, where there is no assurance that participants will properly diversify and each participant typically receives quarterly statements as to the performance of all options, each investment fund's performance is highlighted for all participating employees to see and to voice disquietude to their employers, government regulators, or plaintiffs' class action counsel.

Not surprisingly, the current global bear market has caused a spate of recent ERISA class action litigation challenging fiduciary investing. Defined benefit plans are not the primary target; rather, the litigation has centered on participant challenges to inclusion and retention of specific 401(k) funds.³⁴ Thus far, the courts that apply modern portfolio theory to

33. See generally, Barclays Global Investors, "Mind the Gap! Why DC Plans Underperform DB Plans and How to Fix Them," *Investment Insights Monograph*, Vol 3 (Apr 2000).

34. The Enron debacle, and the significant losses suffered by Enron 401(k) plan participants through investment in Enron stock, have resulted in several class action suits alleging ERISA fiduciary violations, and significant public and media attention surrounding the investment of 401(k) plans in plan sponsor securities. See, eg, *Tittle v Enron Corp* (SD Tex, No. H-01-3913, complaint filed 11/13/01); *Rinard v Enron Corp* (SD Tex, complaint filed 11/20/01); *Kemper v Enron Corp* (SD Tex, No. H-01-4089, complaint amended 12/3/01). Other recent cases involving alleged fiduciary impropriety in offering employer securities as a 401(k) plan investment include: *In re Ikon Of-*

ERISA prudence have done so in the context of defined benefit plans. As these 401(k) plan class actions proceed, and others surely follow, courts should apply such concepts, and particularly covariance principles, to scrutiny of 401(k) plan fiduciary conduct.

In this regard, if an employer is faced with the fact of significant loss in a 401(k) investment option, its legal position cannot but be advanced if it can argue that the volatility of the challenged investment option was balanced by other, low-correlated investment options, that it constructed the fund opportunity set with low correlation concepts in mind, and clearly informed participants of the low correlation of the various investment pieces. And this is where REIT security investing can play a significant role in boosting fiduciary prudence. Publicly-traded REITs offer excellent low correlation with other equity classes. They also are readily marketable and offer good liquidity, additional features that make them particularly attractive to the 401(k) participant-investor.

USE OF REITS TO DIVERSIFY PORTFOLIOS AND REDUCE FIDUCIARY LIABILITY RISK

Growth of REIT Securities and Their Correlation to Stocks and Bonds

Although over forty years old, REITs have had dramatic growth in the last ten years and have matured into a large, liquid, investment-grade sector.³⁵ The equity market capitalization of REITs was approximately \$10 billion at the end of 1990, but stood at \$154 billion at the end of September 2001, and average daily dollar trading volume over the last five years has averaged between \$300-\$700 million.³⁶ Furthermore, growth and consolidation in the REIT industry has increased the trading volume of individual REIT securities, and this trading liquidity allows most pension funds to easily rebalance and meet asset allocation guidelines when investing through REITs.

ficie Solutions, Inc, 86 FSupp 2d 481 (ED Pa 2000); Chang v McKesson HBOC, Inc, No.00-CV-20030 (ND Cal, filed Nov 24, 1999); Kolar v Rite-Aid Corp, No. -01W1229 (ED Pa, filed May 1, 2001); Hudgens v Lucent Technologies, No.-OICV.4186 (DNJ, filed Aug 31, 2001).

35. There are over 300 REITs, approximately 2/3 of which are publicly-traded, and they represent ownership of 10-15 percent of all U.S. institutional-quality real estate. The REIT industry invests in all major property types and in all U.S. geographic regions, with an emphasis on quality office, shopping center/regional mall, industrial park, hospitality and residential apartment properties. This provides significant product range, and allows pension plan fiduciaries to best match the type of REIT investment with its portfolio diversification objectives. See discussion text at n43, *infra*.

36. See "NAREIT Statistical Digest" (copy available upon request from the National Association of Real Estate Investment Trusts (NAREIT)).

Coincident with the rapid growth of REITs over the last decade has been the growth in mutual funds investing in REITs. As of June 2001, Morningstar tracked a total of 51 public mutual funds devoted to or significantly invested in REITs, and mutual fund sponsors are offering at least one REIT index fund and two Exchange Traded Funds.³⁷ REIT funds also may have lower fees than large-cap funds and growth funds, and there may be less active or current “betting” than often found in such other funds.³⁸ The number of REIT mutual funds make REIT investing a readily available investment choice, and as discussed below in conjunction with covariation, an efficient and effective portfolio design component for 401(k) plans.

A REIT investment combines elements of both a traditional real estate and stock investment, and has distinct performance and return characteristics. Its returns are influenced by real estate fundamentals, including levels of tenant occupancy, the supply of and demand for space, and the level and growth of rents. Returns are affected also by the equity market’s assessment of industry-wide and property-specific risks and its pricing of expected earnings and cash flow from operations. Because REITs are public market securities valued daily by analysts and investors, valuations of REIT securities have fewer imperfections than traditional, appraisal-based direct real estate valuations, and, of course, lack the limitations on marketability of direct real estate, its indivisibility (or lumpiness) of assets, and unavailability of short sales.³⁹

REIT investment returns are composed of dividend income and moderate, long-term capital price appreciation. From an investment return perspective, REITs provide significant liquidity to a portfolio through their high current income, because the Internal Revenue Code requires nearly all REIT-generated income from operations and capital gains to be transferred to shareholders in the form of dividends. From January 1994 through August 2001 dividend yields ranged from 5.64 percent to 8.99 percent, averaging 7.2 percent. Dividend growth during the period 1994-2000 consistently outpaced inflation, thus enabling

37. The Vanguard REIT Index Fund tracks the Morgan Stanley REIT index and holds equity REITs with market caps of at least \$100 million. The Barclay’s iShare Cohen & Steers Realty Majors Fund tracks the returns of the Cohen & Steers Realty Majors Index, an index of 30 large, liquid REITs, and the iShares Dow Jones US Real Estate Index Fund tracks the returns of the Dow Jones US Real Estate Index.

38. See “Exotic Turnoff,” *Institutional Investor* (November 1998).

39. REIT stocks are valued on a real-time basis and thus avoid the “seasonality” and “lag” effects typically present in traditional real estate appraisals. Unlike real estate appraisals, REIT stock prices are based on capital market pricing. Thus, the reliability of REIT average returns, volatility of returns, and correlation of returns vis-a-vis other real estate investments should be superior.

REITs, like traditional real estate, to provide a strong inflation hedge.⁴⁰ Because of their high current income plus moderate price appreciation, REIT returns generally fall between the returns to bonds and other stocks. As Ibbotson's REIT analysis shows, and presented below in Exhibit 1, the compound annual total return (income plus price appreciation) for equity REITs during the period 1972-2000 was 12.5 percent, compared with 9.1 percent for bonds and 13.2 percent for the S&P 500. During the eight-year period from 1993-2000, REITs returned 11 percent, compared with 9.5 percent for bonds and 17.1 percent for the S&P 500.

EXHIBIT 1. Rates of Return / Compound Annual Rate in Percent

	<i>REITs</i>	<i>Large Stocks</i>	<i>Small Stocks</i>	<i>Bonds</i>
1972-2000	12.5	13.2	14.7	9.1
1972-1992	13.1	11.7	15.0	9.0
1993-2000	11.0	17.2	13.8	9.5
2000	26.4	-9.1	-3.6	21.5

Source: REITs—NAREIT Equity Index; Large Stocks—Standard and Poor's 500®; Small Stocks—Ibbotson U.S. Small Stock Series; Bonds—20-Year U.S. Government Bond.

As shown below in Exhibit 2, the annualized standard deviation of quarterly returns for REITs is slightly higher than bonds, and slightly below large stocks and small stocks for nearly all measurement periods over the last thirty years.

Perhaps of most significance to the pension plan investor, however, is the correlation of REIT returns with the returns of other stocks and bonds. As shown below in Exhibit 3, based on the analysis of Ibbotson Associates, the correlations of monthly total returns of REIT stocks with the returns of large and small stocks have declined markedly over the past ten years, a period in which the REIT industry has grown and matured substantially.⁴¹

40. See "NAREIT Statistical Digest" (copy available upon request from NAREIT). For REIT mutual funds, the significant income generated from REIT dividends provides such funds with strong cash flow for continued diversification or rebalancing.

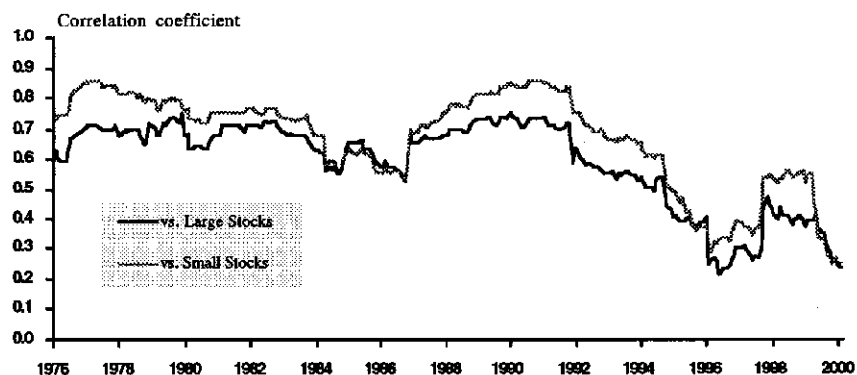
41. The Ibbotson results are consistent with other anti-correlation results identified in other recent studies. See "401(k) Plans Dabble in Real Estate," *Pensions & Investments* (March 1998) (discussing a T Rowe Price study on anti-correlation between REITs and other asset classes, and the strong performance of model portfolios containing 20 percent REITs).

EXHIBIT 2. Volatility of Return — Annualized Standard Deviation of Quarterly Returns in Percent

	<i>REITs</i>	<i>Large Stocks</i>	<i>Small Stocks</i>	<i>Bonds</i>
1972-2000	14.7	16.2	24.9	11.9
1972-1992	15.0	17.1	26.3	12.7
1993-2000	14.2	13.7	21.1	9.5

Source: REITs – NAREIT Equity Index; Large Stocks – Standard & Poor’s 500® ; Small Stocks – Ibbotson U.S. Small Stock Series; Bonds – 20-year U.S. Government Bond.

EXHIBIT 3. Declining Equity REIT Correlation 60-Month Rolling Periods



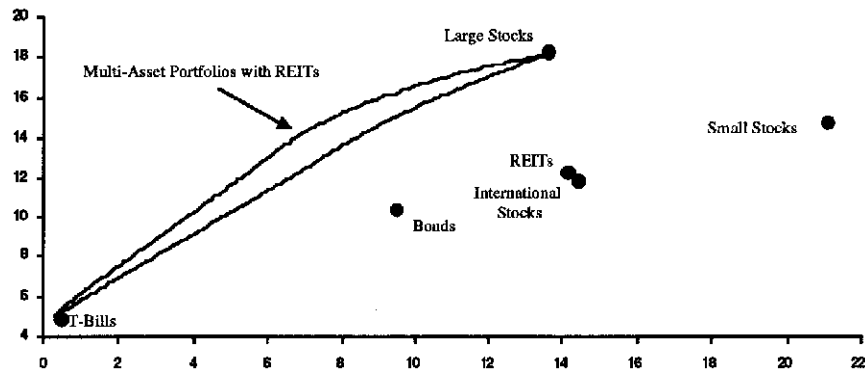
Source: REITs—NAREIT Equity Index; Small Stocks—Ibbotson U.S. Small Stock Series; Large Stocks—Standard & Poor’s 500®. Used with permission. ©2002 Ibbotson Associates Inc. All rights reserved.

The declining correlation over the past 10 years is important because the price discovery mechanism for REIT stocks should have become more reliable and efficient as the REIT industry has become a significantly larger and more liquid public capital market. Indeed, low correlations remained strongly evident during the last two years (2000 and 2001) when REITs posted sizable gains during the decline in the broad equity markets. Finally, Exhibits 4 and 5 below show that an efficient frontier (mean-variance) analysis of a mixed asset portfolio including REITs would have provided a greater return during the 1990s, with less portfolio risk, than a similar portfolio without REIT securities.

Using REITS to Reduce Fiduciary Risk

These results are significant to the defined benefit plan trustee. As indicated above, process is crucial in the demonstration of ERISA fiduciary prudence. A defined benefit plan trustee should conduct correlation coefficient analyses of its assets classes, and update those analyses periodically. More highly focused covariation studies also can and should be employed if found to be helpful in building diversified portfolios. Analyses can examine more than just the overall group behavior of the REIT sector, it can examine the behavior of REIT securities at more detailed

**EXHIBIT 4. Efficient Frontier With and Without REITs
Stocks, Bonds, and REITs 1993–2000**



**EXHIBIT 5. Efficient Portfolios Including REITs
Constrained Optimization 1993–2000**

	<i>Portfolio Allocations</i>					
Small stocks	0%	0%	0%	0%	6%	14%
Large stocks	26%	33%	45%	56%	60%	60%
Bonds	19%	22%	17%	9%	5%	5%
International stocks	20%	20%	18%	14%	9%	1%
T-Bills	15%	4%	0%	0%	0%	0%
REITs	20%	20%	20%	20%	20%	20%
<i>Expected Return</i>	<i>12.2%</i>	<i>13.4%</i>	<i>14.5%</i>	<i>15.4%</i>	<i>15.8%</i>	<i>16.1%</i>
<i>Standard Deviation</i>	<i>5.5%</i>	<i>6.5%</i>	<i>7.5%</i>	<i>8.5%</i>	<i>9.5%</i>	<i>10.5%</i>

Source: Small Stocks—Ibbotson U.S. Small Stock Series; Large Stocks—Standard & Poor’s 500®, International Stocks—MSCI EAFE Index; REITs—NAREIT Equity Index; Bonds—20-year U.S. Government Bond; T-Bills—U.S. 30-day T-Bill. Used with permission. ©2002 Ibbotson Associates, Inc. All rights reserved.

levels, making good use of the wide diversity of property investments REITs own. For example, some economists have suggested that a “size effect” exists for real estate, and that even greater anti-correlation can be achieved between large stocks and smaller-sized, primarily multifamily properties.⁴² A plan trustee wishing to devote a portfolio’s stock fund to large cap equities might wish to analyze and reduce overall portfolio risk by diversifying with REITs focusing on smaller-scale multifamily properties. The use of multifamily sector REITs in such a situation rather than direct multifamily real estate may allow the portfolio objective to be achieved without sacrificing liquidity requirements or reducing marketability of portfolio assets.

Moreover, because REITs invest in all property types, they may also offer positive correlation relationships to equity securities of companies of specific industries. This allows the trustee to use REITs to reduce portfolio risk but maintain expected return objectives. For example, if a covariance analysis were to determine that there is a high, positive correlation between the returns for shopping center REIT securities and the returns of the retail grocery and retail drug industries (i.e., securities pricing for those industries may be related because retail grocery and drug chains provide significant anchor tenant demand) it could reasonably be argued that a portfolio trustee could prudently reduce portfolio holdings in West Coast based supermarket and drug chains in exchange for shopping center REITs concentrated on the West Coast. In such an instance, the portfolio manager would be increasing portfolio diversity without materially affecting expected returns. As indicated above, the more detailed the ex ante covariance analysis, the less it should matter from a prudence prospective if the trustee is unaware of non-portfolio risk in the specific investment.

For the 401(k) plan fiduciary, the use of REITs and their low correlated properties is a potentially powerful tool against claims of imprudence in picking investment options. The 401(k) fiduciary always is at risk of litigation for selecting an option that precipitously drops in value. But if the fiduciary (a) conducts studies of the correlation between the returns of REITs, the challenged investment option, and other low correlated investments, (b) includes properly low correlated REITs in the portfolio, and equally important, (c) *communicates to participants the fact of the anti-correlative relationship*, the fiduciary can legitimately argue that the risk of the challenged option was offset by the REIT alter-

42. See Kalberg et al, “The Role of Real Estate in the Portfolio Allocation Process,” 24 *Real Estate Economics* 359 (1996).

natives.⁴³ The diversifying REIT option may properly shield participants from undue risk. Any significant participant loss in such event should simply be the result of the participant's failure to diversify.⁴⁴

For example, many companies offer company stock as part of the 401(k) option set. Indeed, company stock is usually the only single-issue security investment in the plan. Those 401(k) plans that include company stock create the greatest risk of fiduciary litigation if only because of the perceived conflict between a corporate interest in offering such securities through the plan and the company's fiduciary duty to offer only prudently-chosen investment options.⁴⁵ In some circumstances, REIT funds can be used to reduce the risk of liability, and also may be properly offered as a substitute for company stock.

Assume a NASDAQ-traded biotechnology company in Seattle wishes to offer company stock as an investment option. The company might be well advised to conduct correlation tests between the returns to the company stock (or a biotechnology stock index) and the returns to equity REITs (through reference to, e.g., the NAREIT Equity Index). If the results demonstrate a relatively low correlation between the company stock (or index) returns and REIT returns, the company could then choose to offer REITs as a way to help mitigate the risk of offering the company stock.⁴⁶ It also should make available to participants publicly available financial information about the individual company, the historic performance of biotechnology stocks, and the diversification value of REIT securities. If it does, absent corporate fraud, material misuse of corporate information by the 401(k) plan fiduciary, or misrepresentation to plan participants, there should be no reason why the company or the plan fiduciaries should be deemed imprudent for inclusion of company stock as a fund option.⁴⁷

43. See generally Labor Department IB 96-1, 29 CFR § 2509.96-1 (encouraging employers to provide participant investment education, including, *inter alia*, asset allocation models and information on differences in rates of return and risk between asset classes).

44. Indeed, in light of the focus on conduct in determining prudent behavior, it should matter little whether during the period of the fund's decline the REIT option showed significant offsetting, anti-correlative gain. The more relevant inquiry would be whether the ex ante study of anti-correlation was informed and complete, and the communication to participants complete, fair, and understandable.

45. See cases cited at n34, *supra*.

46. It is, however, widely recognized that a key element in managing risk through diversification is to minimize the concentration of assets in any single security, such as company stock. Thus, adding low correlated assets, such as REITs, to such a portfolio is unlikely to reduce materially the risk from high concentrations in a single security.

47. Of course, the malfeasances allegedly engaged in by the fiduciaries of the Enron 401(k) pension plan, if proved, would not be immunized by ex ante correlation analyses and participant communications suggested herein. There has been no public mention, however, to date that Enron plan fiduciaries engaged in the type of analysis recommended by this paper.

In some cases there may be significant positive correlation between the stock of a 401(k) plan sponsor and certain types of REIT securities. One should not expect Doubletree to achieve adequate portfolio covariance protection in connection with its company stock by adding a REIT fund specializing in hotel/hospitality REIT securities to its investment option set. In lieu of offering an employer stock option, a hotel or hospitality chain could offer a lodging REIT mutual fund that contains its stock in the fund. That could provide employees the opportunity to link pension plan performance with company performance on an indirect and more diversified basis. In such situations, as mentioned above, the relationship between a REIT investment option and the plan's other investment options needs to be communicated to participants.⁴⁸

ADVANTAGES OF REITS OVER OTHER PORTFOLIO DIVERSIFIERS

Among the available options to achieve strong 401(k) plan returns with appropriately diversified portfolio risk, REITs have significant practical and economic advantages over other types of less traditional 401(k) investments. High yield bond funds, for example, also have been shown to have low correlation to stocks and high quality bonds. It is often difficult, however, for 401(k) participants to understand the difference between high quality and high yield bonds; real estate is more easily understood, and the risk of participant error is far less.⁴⁹ International bond funds also behave differently than U.S. stocks and bonds, but their performance is often determined by national currency fluctuations and political and economic events, creating both significant volatility and difficulty in predicting behavior. Long/short, or market neutral, hedge funds offer the potential for terrific returns regardless of market climate, but fund fees and expenses are often quite high, and the learning curve for 401(k) participants to understand such investment strategies is enormous. Real estate is an investment that is far easier to understand and exists in every 401(k) participant's hometown. REITs provide easy, low cost

48. Moreover, many advisors are now recommending that companies that include a company stock option in their 401(k) plans limit the percentage of a participant's total account that might be invested in that company stock. For a hospitality company, such action could be supplemented by addition of a hospitality REIT mutual fund that contains the company stock; for an elder care company, such action could be supplemented by addition of a health care REIT mutual fund containing its stock.

49. See "New Alternatives to Traditional 401(k) Investments," DC Plan Investing (Institute of Management & Administration, Nov 2000).

access to the diversification benefits of real estate and thus have significant practical and economic advantages over many of these other portfolio diversifiers.

CONCLUSION

Pension plan investors enhance their claim of legally prudent decision-making when they construct a diversified portfolio employing reasonable, a priori correlation analyses. The growth and maturity of the REIT industry over the last decade now enables pension plan investors to predict more reliably the standard deviation and correlation of publicly traded real estate securities with other asset classes. Recent studies by Ibbotson Associates show that real estate securities have a significantly low correlative effect with other assets classes. Combined with the relatively strong total return performance of real estate stocks over the last 20 years, this suggests that real estate securities can boost return and reduce overall volatility when added to a diversified portfolio. From a legal perspective, their inclusion in pension portfolios or 401(k) plan option sets should significantly bolster the fiduciary's prudence position.