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**Issues in Comprehensive Personal Financial Planning** (pp.1-9)

Kenneth Black, Jr., Conard S. Ciccotello, Harold D. Skipper, Jr.

Increasing numbers of firms within the financial services industry continue to organize around the concept of delivering comprehensive personal financial planning (PFP) services. PFP delivery models reflect the desire to control client relationship and realize economies of scope. In this article, we argue that the need for comprehensive PFP is well grounded theoretically, although research to guide the appropriate application of the theory remains lacking. Comprehensive PFP is not without its potential costs, including risks associated with lessened advisor diversification at the client level, reduced transparency, and agency problems. To address these risks, consumers likely will turn to credentials as a proxy for quality and trustworthiness. (C) 2002 Academy of Financial Services. All rights reserved.

**Who Should Buy a Nonqualified Tax-deferred Annuity?** (pp. 11-31)

William Reichenstein

The study describes the structure of nonqualified tax-deferred annuities and examines when they are in the best interest of individual investors as savings vehicles. It concludes that, unless they are concerned about creditor protection, few individuals should consider saving in an annuity. Those few must decide between an annuity and a mutual fund held in a taxable account. In general, young investors with long investment horizons should consider annuities. Costs are a critical factor, however. Most annuities have high costs compared to mutual funds. This study concludes that investors fare better with either low-cost annuities or low-cost mutual funds. (C) 2002 Academy of Financial Services. All rights reserved.

**Wealth and Risk from Leveraged Stock Portfolios** (pp.33-46)

Dale L. Domian, Marie D. Racine

A modest amount of leverage enhances the performance of stock portfolios in the long run. However, higher amounts of leverage produce dramatic declines in long-run wealth. Using probability distributions constructed from value-weighted stock index returns and a borrowing rate two percentage points higher than Treasury bills, the maximum median ending wealth is achieved with an asset allocation of 170% stock. We use Value at Risk (VaR) to measure downside risk over a range of asset allocations and holding periods. (C) 2002 Academy of Financial Services. All rights reserved.

## **Direct Investing: The Role of Stock Purchase Plans** (pp.47-63)

H. Kent Baker, Walayet A. Khan, Tarun K. Mukherjee

Direct stock purchase plans (DSPPs) represent an innovative financial service that provides individual investors with a cost effective and easy way to become stockholders. We survey managers of 267 U.S. companies with DSPPs to determine their reasons for establishing such plans, the *factors* contributing to their success in attracting investors, and their *views* about the future of DSPPs. The results show that companies offer DSPPs for both economic and relationship-related reasons. The major factors contributing to a plan's success are low cost combined with ease and convenience but promotional restrictions limit the ability of firms to attract investors. In the future, companies are likely to adopt DSPPs if they want to add small investors to the shareholder. base. (C) 2002 Academy of Financial Services. All rights reserved.

## **How Quickly Should You Liquidate Your Vested Stock?** (pp.65-84)

Robert Dubil

I model the optimal behavior of an individual or trustee who decides to liquidate a position in an asset. As his holdings are large, his own sales may have adverse permanent and temporary impact on the realized return. To minimize this effort, a wealthy, insider may choose to liquidate slowly. At the optimum, he balances the exposure to the return variance against sale-induced price concessions by using a Value-at-Risk-inspired risk-reward function as his decision tool. The prescriptive appeal of the model is demonstrated numerically. For example, I show that a risk-averse individual holding @1 million of his wealth in a stock, subject to 50% volatility and linear temporary impact of \$1,900, should optimally take 10 days to liquidate (C) 2002 Academy of Financial Services. All rights reserved.

## **The Pitfalls of Using Short-Interval Betas for Long-Run Investment Decisions** (pp.85-95)

Charles W. Hodges, Walton R.L. Taylor, James A. Yoder

We investigate empirical relationships between beta, the Treynor ratio, and the investment horizon for portfolios of small stocks, large stocks, and bonds. Betas and Treynor ratios are computed for holding periods of 1 to 30 years. For both the stock and bond portfolios, beta and the Treynor ratio change substantially with the holding period. Furthermore, the relative Treynor rankings of the portfolios change. Therefore, betas and Treynor ratios cannot be calculated independently of the intended investment horizon. Our results suggest that the impact of one's assumed investment horizon has not received sufficient attention in computing systematic risk (beta) or interpreting reward-to-risk performance measures (such as the Treynor ratio, Sharpe ratio, or Jensen's alpha). Thus, investors with long-run investment horizons must interpret performance parameters obtained from investment advisory services with due considerations for horizon effects. (C) 2002 Academy of Financial Services. All rights reserved.

**Psychological Biases of Investors** (pp.97-116)

H. Kent Baker, John R. Nofsinger

We review the field of behavioral finance as it relates to investors. Specifically, we-examine common investments mistakes caused by an investor's cognitive and emotional weaknesses and group these mistakes into two categories: how investors think and how investors feel. Although most recent research deals with these psychological influences in investor decision-making, we also discuss social factors that affect financial decisions. We suggest five steps that investors can take to help overcome common investor mistakes. Finally, we present some thoughts on further behavioral research involving investors. (C) 2002 Academy of Financial Services. All rights reserved.

**Equity Allocations and the Investment Horizon: A Total Portfolio Approach** (pp.117-133)

R. Douglas Van Eaton, James Conover

We offer a streamlined life-cycle model that provides support for the common advice given to investors to hold large initial equity allocations among financial assets and then reduce them as retirement nears. We examine how total portfolio wealth varies at different horizons. We find that if the financial component of a total retirement portfolio is large (small), compared to anticipated future contributions. Then the equity allocation should be reduced (increased) to target that individual's desired risky asset allocation of total wealth. Our examples and historical tests favor allocation strategies that depend on individual financial circumstance and portfolio horizons. But, somewhat surprisingly, even highly risk-averse individuals should choose to hold all equity retirement portfolios when beginning to save for retirement. (C) 2002 Academy of Financial Services. All rights reserved.

**Including Real Options in Evaluating Terminal Cash Flows in Consumer Auto Leases** (pp.135-151)

Pete Oppenheimer

Leasing has become a popular method of financing automobile acquisitions. According to White (2001), consumers now acquire a majority of luxury automobiles using lease financing. Traditional lease analysis ignores the value of options embedded in the lease that affect the terminal cash flows. This paper shows that terminal cash flows from an automobile lease should be viewed as a call option and several par options, each containing different exercise prices. The paper contains data to assist in empirically estimating the values of these options at the end of an automobile lease. Results show that ignoring the interplay of option values at the end of the lease may lead to costly financing decisions by the consumer. (C) 2002 Academy of Financial Services. All rights reserved.

## **Factors Related to Meeting the Capital Accumulation Ratio Guideline** (pp.153-171)

Rui Yao, Sherman D. Hanna, Catherine P. Montalto

The capital accumulation ratio. Investment assets divided by net worth, has been proposed as a useful indicator of financial health. Various experts recommend a minimum value of 25% to 50% for the ratio. When certificates of deposits are not counted as investment assets, 56% of U.S. households meet the 25% guideline and only 40% meet the 50% guideline. In a multivariate logistic regression, education, income, number of years until retirement, overspending, and financial risk tolerance are positively related to meeting the guidelines. (C) 2002 Academy of Financial Services. All rights reserved.

## **An Investigation of the Impact of Derivative Use on the Risk and Performance of UK Unit Trusts** (pp.173-187)

Jonathan Fletcher, David Forbes, Andrew Marshall

A popular investment choice for UK investors is unit trusts. This paper examines the impact of derivative use on the risk, performance, and risk management of UK unit trusts between January 1995 and December 1997, extended an earlier US study. Despite the well-documented increased use of derivatives by corporate investors, approximately three-quarters of our UK sample did not use derivatives, consistent with US evidence. The main findings of the paper show that the cross-sectional variability of a number of risk measures tends to be larger for trusts that use derivatives compared with those who do not use derivatives. Derivative use tends to have little influence on performance inferences for the overall sample of trusts but does for some investment sectors of our trust sample. Finally, in contrast to evidence in the US, trusts that use derivatives tend to have less severe changes in risk due to past performance within a calendar year. The findings have important implications for the existing regulations in the UK on derivative use by unit trusts that prohibit the use of derivatives for speculative purposes and for the large number of individual investors who invest in these trusts. (C) 2002 Academy of Financial Services. All rights reserved.

## **Risk and Return in the TIPS Market** (pp.189-199)

Winfield P. Betty, Karan Bhanot

In this article, the risk and return characteristics of Treasury Inflation Protected Securities (TIPS) are empirically examined and compared to those of a series of investments in Treasury Bills. Using secondary market prices for the period January 1997 to May 2001 on TIPS issued in the United States, we show that TIPS offer a marginally higher average return but a much higher volatility of returns than a series Treasury Bills, for various investment horizons. We argue that the observed risk/return qualities are introduced by the variability of real rates and the taxation of inflation adjustments made to TIPS. (C) 2002 Academy of Financial Services. All rights reserved.

**The Role of Universities in the Development of the Personal Financial Planning Profession** (pp.201-216)

Thomas Warschauer

I begin this paper with a discussion of the emergence of the personal financial planning profession from its financial services roots. I then provide definitions of financial planning from several points of view. After a review of the reasons for growth in the profession, I examine the relationship between universities and other planning constituents. In particular, I focus on the importance of education and practice standards in the development of the financial planning profession. Much research remains to be conducted to guide the practice of financial planning. I describe the state of the knowledge base for financial decisions, using an example. The paper concludes with a discussion of the role of universities in the future of the financial planning profession. (C) 2002 Academy of Financial Services. All rights reserved.

**Use of Financial Planners by U.S. Households** (pp.217-231)

Stephanie A. Elmerick, Catherine P. Montalto, Jonathan J. Fox

We examine the use of the financial planners by U.S. households using data from the 1998 Survey of Consumer Finances and find that over one-fifth (21.2%) of households use financial planners. A small portion of households (2.7%) obtain advice from financial planners on only credit or borrowing, whereas 11.5% look for recommendations on only saving or investing issues, and 7.0% obtain comprehensive advice (i.e., credit or borrowing and saving or investing). The use of financial planners by households varies by financial and sociodemographic characteristics of the household, and the effects of these characteristics vary by category of use (i.e., credit/borrowing only, saving/investing only, comprehensive advice). (C) 2002 Academy of Financial Services. All rights reserved.

**On the Valuation of Tax-Advantaged Retirement Accounts** (pp.233-251)

Mike Sibley

Individuals who invest for retirement often hold investment assets in a variety of different types of accounts, some tax sheltered and some not. The different tax treatment applied to different types of tax-advantaged accounts complicate the task of calculating a single consistent measure of total wealth accumulation. This paper derives models for determining the current after-tax dollar equivalent of assets held in common tax-advantaged retirement accounts so that a prospective retiree can more easily calculate a clear and understandable measure of total wealth accumulation. The results indicate that under certain conditions pre-tax dollars held in a tax-deferred retirement account can be more valuable than an equal number of after-tax dollars, if they are to be used to fund future consumption expenditures. The models developed permit the analysis of many retirement planning decisions using capital investment theory. (C) 2002 Academy of Financial Services. All rights reserved.

## **After- Tax Valuation of Tax- Sheltered Assets** (pp.253-275)

Stephen M. Horan

Valuing tax-sheltered assets on an after-tax basis has many applications. This paper develops models that accommodate annuitized withdrawals from tax-sheltered accounts, an after-tax mutual fund cost of capital, and some variation in the tax rate over time. Annuitized withdrawals significantly decrease the after-tax value of tax-sheltered accounts compared to a single withdrawal over the same time period. Also, after-tax mutual fund discount rates ignorantly increase the after-tax cost of capital thereby decreasing after-tax exposure by as much as ten percentage points. (C) 2002 Academy of Financial Services. All rights reserved.

## **Cost-Benefit Analyses of Employee Dependent Care Assistance Plans** (pp.277-287)

Thomas S. Coe

An Employee Dependent Care Assistance Plan reduces the amount of tax withheld, increasing annual take-home pay. However, there are also costs of participating in a Plan. The funds deducted from the employee's earnings will not be immediately available. This penalizes the employee until expenses are actually reimbursed. This paper shows that the cost of not participating in a Dependent Care Assistance Plan is substantially higher for most employees than the opportunity cost of lost interest on savings. The findings hold even if finance charges for cash advances are necessary. (C) 2002 Academy of Financial Services. All rights reserved.

## **Gender Differences in Personal Financial Literacy Among College Students** (pp.289-307)

Haiyang Chen, Ronald P. Volpe

Surveying financial literacy among college students, we find that women generally have less knowledge about personal finance topics. Generally differences remain statistically significant after controlling for other factors such as participants' majors, class rank, work experience, and age. We do find, however, that education and experience can have a significant impact on the financial literacy of both men and women. We observe that women generally have less enthusiasm for, lower confidence in, and less willingness to learn about personal finance topics than men do. College women (men) rate English and humanity (Mathematics and science) courses more important. We argue that the study paves the way for future research and has important policy implications given the women tend to outlive men. (C) 2002 Academy of Financial Services. All rights reserved.

**Partial Privatization of Social Security: A Simulation of Possible Outcomes and Risks to Workers** (pp. 311-326)

Michael Tucker, Fairfield University

Social Security reform as put forward by the President's Commission on Strengthening Social Security (2001) includes three model proposals each of which contain voluntary privatized accounts. Opting for private savings incurs the penalty of losing benefits that accrue in a set-aside account. Three simulations were run using Monte Carlo simulation based on historical distributions of stock and bond returns. These simulations projected end-of-period savings under different market conditions for Model 2, the only model projecting elimination of Social Security deficits. In all cases the average privatized account accumulations were greater than the set-aside benchmark account; however, the probability of falling below the set-aside account's lost benefits range from a low of 13% to a high of 30%. The considerable probability of failing to exceed a lost-benefits account will be an important consideration for workers in determining whether or not to exercise the option to participate.

**Catastrophic Risk, Homeowner Response, and Wealth-Maximizing Wind Damage Mitigation** (pp. 327-340)

Robert T. Burros, Ir., Christopher F. Dumas, I. Edward Graham, Jr.,

Many experts encourage homeowners to improve their houses to better survive natural catastrophes and reduce overall societal costs. However, we find that these encouragements are not necessarily financially sound for the homeowner at risk of hurricane wind damage. We find that subsidized insurance reduces the incentive for a risk-neutral homeowner to purchase structural mitigation, because mitigation does not generally reduce damages to below subsidized deductibles. If insurance premiums increase or if hurricane strike probabilities or market returns decrease, then the wealth-maximizing homeowner drops insurance and purchases mitigation. For homeowners to purchase both mitigation and insurance, high-deductible/low-premium insurance must be offered.

**Withdrawal Patterns and Rebalancing Costs for Taxable Portfolios** (pp. 341-366)

J. Christopher Hughen, Francis E. Laatsch, Daniel P. Klein, B

This article quantifies the effect of taxes on the magnitude and variability of cash flows from taxable retirement portfolios. While previous research focuses on pretax cash flows, this paper includes taxes associated with rebalancing and withdrawals. We incorporate the differential tax treatment of interest income and capital gains. Taxes have dramatic effects on the size and variability of the after-tax cash flows withdrawn from the portfolio. Financial planners may use our results to determine the ideal equity allocation in taxable retirement portfolios. For withdrawals below 5% and above 8% of initial portfolio value, our results suggest that the 100% equity allocation generally provides the most attractive trade-off between risk and return during the retirement period. Even for

withdrawals (as a percentage of initial portfolio value) from 5% to 8%, the 100% equity allocation is an attractive choice because it has substantially higher mean terminal value and similarly higher mean after-tax cash flows. An analysis of inflation-adjusted withdrawal amounts also strongly favors the 100% equity allocation.

## **An Investigation of Adjustable-rate Mortgage Pricing Features**

(pp. 367-379)

William K. Templeton, Robert S. Main, J. B. Orris

Mortgage borrowers face the difficult prospect of evaluating the costs and risks associated with the choice of terms for adjustable-rate mortgages. This study uses a simulation approach to model the choices. We represent the risk of the adjustable-rate mortgages with distributions of present value-cost differentials for a variety of mortgage life periods. We provide insight on the financial planning aspect by modeling the impact of mortgage-rate changes on the size of payments for adjustable-rate mortgages. Simulation can yield nonintuitive results that may lead to better decision making by borrowers.

## **What Factors Affect the Household Net Worth of Employees and Business Owners?**

(pp. 381-391)

Zhan (Sandy) Chen, Sharon A. DeVaney

Why do some households accumulate a prodigious amount of wealth while others have barely enough to meet their needs? This study investigates the effects of financial attitudes, financial behavior, employment, and socioeconomic factors on the household net worth of employees and business owners. Regression analysis using the 1998 Survey of Consumer Finances shows that household income has the largest impact on employees' net worth. The ownership of a large business and household income have the largest impact on business owners' net worth. Being frugal also influences business owner's net worth.