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**Stochastic optimization of retirement portfolio asset allocations and withdrawals** (pp. 1-15)

R. Gene Stout

Stochastic optimization identifies the asset allocation that minimizes the probability of exhausting the retirement portfolio, thereby minimizing risk, from unmanaged (constant) and optimally managed withdrawals over the retirement life span. Optimal equity compositions and minimized probabilities of prematurely exhausting the portfolio increase with higher withdrawal rates and earlier retirements with both managed and unmanaged withdrawals. However, optimal withdrawal management from optimally managed portfolios reduces the sensitivity of premature portfolio exhaustion to higher initial withdrawal rates or earlier retirements, thereby reducing the increase in the risk of exhausting the portfolio necessary to support the improved lifestyles from higher withdrawals, longer retirements, or both. © 2008 Academy of Financial Services. All rights reserved.

**Retirement withdrawals: an analysis of the benefits of periodic “midcourse” adjustments** (pp. 17-29)

John J. Spitzer

Much research has addressed the question of how much money can safely be withdrawn from a retirement portfolio without prematurely running out of money (shortfall risk). Instead of constant (inflation adjusted) annual withdrawals, this study uses withdrawal amounts (and optionally, asset allocations) that are modified every five years over a 30-year withdrawal horizon. A bootstrap is used initially to obtain the conditional probability rules. Further simulations demonstrate that periodic (every five years) adjustments can decrease the risk of running out of money as well as increase the amount withdrawn, as compared to a “constant withdrawal amount” strategy. © 2008 Academy of Financial Services. All rights reserved.

**Evidence on the profitability of credit card arbitrage** (pp. 31-47)

Terrance Jalbert, Jonathan Stewart, Mercedes Jalbert

Financial institutions frequently offer low introductory interest rates to entice individuals to open and use credit accounts with their firm. This paper examines the possibility of earning arbitrage profits by taking advantage of these special offers. We develop a formula to measure the profit potential from undertaking credit card

arbitrage and identify conditions conducive to profitable and unprofitable arbitrage. In addition, we examine the sensitivity of the arbitrage transaction to changes in interest rates, interest rate levels, and fees. Finally, we examine the impact of credit card arbitrage on the credit rating of the arbitrageur. © 2008 Academy of Financial Services. All rights reserved.

## **Performance and characteristics of actively managed retail equity mutual funds with diverse expense ratios** (pp. 49-68)

John A. Haslema, H. Kent Bakerb, David M. Smith

We investigate the relation between the performance and characteristics of 1,779 domestic, actively managed retail equity mutual funds with diverse expense ratios. We show that using expense ratio of standard deviation classes is an effective method for characterizing fund expenses for investors. Using various performance measures including Russell-index-adjusted returns, the results indicate that superior performance, on average, occurs among large funds with low expense ratios, low trading activity, and no or low front-end loads. Performance is invariant with respect to whether funds have 12b-1 fees. © 2008 Academy of Financial Services. All rights reserved.

## **Optimal asset allocation in the presence of nonfinancial assets** (pp. 69-86)

Vladyslav Kyrychenko

In this paper, a comprehensive mean-variance model, which includes all major nonfinancial assets (housing, human capital, and private business) besides financial ones is calibrated with empirical data to generate optimal asset allocations between stocks, bonds, and cash. The model is used to investigate the effect that each of the nonfinancial assets has on the optimal mix of financial assets. Among others, it generates the optimal portfolio allocation for investors working in different industries and living in different cities. The model is also able to rationalize a popular investment advice recommending decreasing share of stocks in financial portfolios with increasing age. © 2008 Academy of Financial Services. All rights reserved.

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## **How prepared is the retirement industry for meeting the needs of retiring american workers?** (pp. 87-103)

Betty Meredith, John R. Salter

There are 78 million reasons driving the need for a tremendous increase in the number of professionals prepared to competently help retiring American workers manage their retirement income. The literature, trends, potential societal impact, and complex decisions required of retiring workers are compelling. Retirement income management advice, guidance, and education for clients with assets in employer-sponsored plans are the explosive career growth

opportunity of the next decade. Advisors traditionally have not considered the midmarket a primary target, providing students a unique opportunity to enter careers servicing employer-sponsored retirement

## **A new model for retirement education and counseling** (pp. 105-130)

Mary Willett

Many research studies have illustrated that Americans are not adequately planning for their

retirement futures and not taking advantage of the retirement programs being made available to them at their worksite. This paper combines original research conducted by the International Foundation for Retirement Education (InFRE) as part of the InFRE Retirement Readiness Project with other studies that have been conducted over the past few years to examine the current state of retirement readiness and why workers' perceptions about their retirement futures generally do not match their actions. The conclusions from this research suggest changes to employer-sponsored Section 457, 401(k), and 403(b) plans to enhance education and counseling services to address total retirement well-being. The research also suggests modifications to the retirement plan design to simplify and automate enrollment, investment strategies, and distribution choices that can provide income over the participants retirement lifetime. © 2008 Academy of Financial Services. All rights reserved.

## **Retirement education in the workplace** (pp. 131-141)

Patricia A. Krajnak, Sharon A. Burns, Sally M. Natchek

In recent years, households have been expected to take more responsibility with respect to personal financial decisions. Workplace financial education is viewed as a means to help employees deal with the increasingly complex financial choices they face. This article provides an overview of literature that has examined the prevalence and effectiveness of personal finance and retirement education programs in the workplace. Results of a survey by the International Foundation for Employee Benefit Plans provide insight concerning the methods of delivery, topics covered and which workers are eligible to participate in workplace financial planning programs. The research suggests that those who participate in financial education seminars change their savings goals and behaviors in a positive way. At present, group meetings and workshops are the most popular method of program delivery in the workplace; however, web-based tools are gaining in popularity.

## **Shortfall risk of target-date funds during retirement** (pp. 143-153)

John J. Spitzer, Sandeep Singh

Target-date mutual funds are likely to increase in popularity because they are now one of the three approved default options for many retirement plans. In the retirement years, target-date funds become increasingly conservative with higher bond concentrations. Using a bootstrap simulation and rolling period analysis, three target-date fund classifications are shown to have higher probabilities of running out of money and lower balance remaining when compared to fixed allocation portfolios. A fixed 50/50 stock/bond portfolio unambiguously out-performs the target-date funds, regardless of methodology employed. In light of this evidence, these funds should revisit their asset allocation strategy. © 2008 Academy of Financial Services. All rights reserved.

## **Optimizing social security benefit initiation and postponement decisions: a sequential approach** (pp. 155-168)

Joseph Friedman, Herbert E. Phillips

The paper supposes, consistent with law, that single or married Social Security beneficiaries view an initiation or postponement decision in terms of a sequential decision process rather than in terms of a single evaluation made at or before the normal retirement age. The question asked at each age, according to the sequential approach introduced in this paper, is not whether to initiate now or postpone until some time in the distant future, but whether to initiate now or postpone for just one year. This paper shows that the opportunity rate of return (or minimum investment yield) required to justify initiation at any eligible age (62 through 69), varies from one eligible retirement age to the next within any cohort group, and at any eligible age across cohort groups. Moreover, while members of a particular cohort group might find it advantageous to initiate benefits at a particular age, say at age 62, early retirement might not be advantageous a year later. This oscillation, uncovered by sequential analysis, could not be so easily demonstrated using an aggregative approach. © 2008 Academy of Financial Services. All rights reserved

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## **After-tax value of annuities** (pp. 169-184)

Stephen M. Horan, Thomas R. Robinson

The paper supposes, consistent with law, that single or married Social Security beneficiaries view an initiation or postponement decision in terms of a sequential decision process rather than in terms of a single evaluation made at or before the normal retirement age. The question asked at each age, according to the sequential approach introduced in this paper, is not whether to initiate now or postpone until some time in the distant future, but whether to initiate now or postpone for just one year. This paper shows that the opportunity rate of return (or minimum investment yield) required to justify initiation at any eligible age (62 through 69), varies from one eligible retirement age to the next within any cohort group, and at any eligible age across cohort groups. Moreover, while members of a particular cohort group might find it advantageous to initiate benefits at a particular age, say at age 62, early retirement might not be advantageous a year later. This oscillation, uncovered by sequential analysis, could not be so easily demonstrated using an aggregative approach. © 2008 Academy of Financial Services. All rights reserved.

## **Are the AAI stock screens a useful tool for investors?** (pp. 185-201)

Frederick P. Schadler, Brett D. Cotten

The American Association of Individual Investors (AAII) offers a variety of screening tools to help investors select stocks. We analyze the effectiveness of these tools. While we find support for AAI's statement that 91% of their screened portfolios beat the S&P 500, we note that this overstates the effectiveness of their screens. Many of the return differences are not statistically significant, and their analysis ignores transactions costs and risk differences. Our analysis reveals that when transactions costs are considered, 32% significantly beat the S&P 500, and 26% of low transaction cost strategies significantly beat their best-fit indices. © 2008 Academy of Financial Services. All rights reserved.

## **Valuation of assets in taxable accounts and annuities** (pp. 203-217)

William Reichenstein

Horan and Robinson (2008) and I agree on several issues including how to calculate the after-tax value of assets held in tax-deferred accounts like a 401(k) and tax-exempt accounts like a Roth IRA. We agree that an asset's after-tax value is its after-tax future value when discounted back to the present by dividing by one plus the risk-appropriate discount rate. However, we disagree about the risk appropriate discount rate for and, therefore, after-tax value of (1) assets held in taxable accounts and (2) assets that earn tax-deferred returns, where the latter include assets held in non-qualified annuities and passively-held stocks in taxable accounts. This study explains my arguments for calculating the after-tax values of these assets.

## **Investment management and personality type** (pp. 219-236)

Cliff Mayfield, Grady Perdue, Kevin Wooten

We examine several psychological antecedents to both short-term and long-term investment intentions, with specific focus on the Big Five personality taxonomy. The effects of specific personality traits are evaluated using structural equation modeling (SEM). Our results indicate that individuals who are more extraverted intend to engage in short-term investing, while those who are higher in neuroticism and/or risk aversion avoid this activity. Risk adverse individuals also do not engage in long-term investing. Individuals who are more open to experience are inclined to engage in long-term investing; however, openness did not predict short-term investing. The implications of these findings are discussed. © 2008 Academy of Financial Services. All rights reserved.

## **Your mortgage loan: Fairly priced, ... or not?** (pp. 237-256)

Christine McClatchey, Cris de la Torre

We examine several psychological antecedents to both short-term and long-term investment intentions, with specific focus on the Big Five personality taxonomy. The effects of specific personality traits are evaluated using structural equation modeling (SEM). Our results indicate that individuals who are more extraverted intend to engage in short-term investing, while those who are higher in neuroticism and/or risk aversion avoid this activity. Risk adverse individuals also do not engage in long-term investing. Individuals who are more open to experience are inclined to engage in long-term investing; however, openness did not predict short-term investing. The implications of these findings are discussed. © 2008 Academy of Financial Services. All rights reserved.

## **The market for retail certificates of deposit: Explaining interest rates** (pp. 257-271)

Raymond M. Johnson, David R. Lange, Joseph A. Newman

Retail certificates of deposit provide financial institutions with funds and depositors with income. Because interest rates and terms on deposits vary, understanding the reasons for the variation should help participants in this market make better decisions. This study explores interest rates and terms on deposit offerings from banks and thrifts while controlling for risk, service, and demographics. Results suggest that less than perfect market efficiency exists to the extent that institutions paying lower interest rates without offering other benefits may still obtain deposits, and depositors may improve returns and receive other benefits by comparing rates. © 2008 Academy of Financial Services. All rights reserved.

## **Disability income insurance premiums: An investigation of the decision to pre-tax or post-tax the premiums** (pp. 273-288)

Terry L. Crain, Frances L. Ayres

Individuals who pre-tax their disability insurance premiums must pay tax on any disability benefits they receive. However, individuals who pay for the insurance with after tax dollars may exclude the benefits from their taxable income. In this paper, we investigate whether the expected tax savings are greater for individuals who pre-tax or post-tax disability income insurance premiums. Using disability statistics from the Commissioners Income Disability Table, expected values of tax savings are computed for various income levels and age groups. Generally, younger individuals with lower incomes achieve a reduction in expected taxes if they pre-tax the disability income insurance premiums. Older individuals with higher incomes often achieve a reduction in expected taxes when they pay for disability insurance premiums with post-tax dollars. Individuals who have just entered a higher tax bracket in the year of the insurance payments often achieve a tax savings by pre-taxing the premiums. Finally, individuals with substantial other income besides his or her salary, generally are better off to post-tax the premiums. © 2008 Academy of Financial Services. All rights reserved.

## **Social security: Who wants private accounts?** (pp. 289-307)

Michael Finke, Ph.D., CFP, Swarnankur Chatterjee, Ph.D

Preference for partial privatization of social security is explored using a 2004 sample of 7,565 young baby boomers. Two-thirds of the sample would choose partial privatization. Although a greater proportion of higher-income, wealthier, and more educated respondents preferred private accounts, multivariate analysis reveals that intelligence has a stronger effect than socio-economic variables. An average of 43% would be invested in equities, but a surprising 35% would be invested in government bonds. Men and those with higher intelligence are more likely to prefer equities, whereas women prefer corporate bonds and the less educated, Blacks, and respondents with children preferred government bonds. © 2008 Academy of Financial Services. All rights reserved.

## **Harvesting capital gains and losses** (pp. 309-321)

Margaret Hwang Smith, Gary Smith

Monte Carlo simulations are used to demonstrate that a very attractive tax-based trading strategy is to realize all capital losses, using excess losses to offset realized gains to rebalance the portfolio. This strategy increases the mean and median return by taking advantage of the tax-deductibility of losses, and mitigates risk by allowing low-cost portfolio rebalancing. This portfolio rebalancing also restarts the basis and time clock, thereby planting the seeds for a future harvesting of capital losses that can be deducted from income and used to rebalance the portfolio perpetually. © 2008 Academy of Financial Services. All rights reserved.

## **Retirement plans for college faculty at public institutions** (pp. 323-341)

Karen Eilers Lahey, Stuart Michelson, Natalie Chieffe, Vickie Bajtelsmitd

This study provides a base line cross sectional analysis of defined benefit (DB) and defined contribution (DC) retirement plans based on the largest four-year public institutions of higher education in each of the 50 states. The focus is on types of plans that are being offered and an evaluation of their risk and return. Findings provide comparative analysis on the broader trends in DB and DC plans offered by other public and private plans. © 2008 Academy of Financial Services. All rights reserved.