## FINANCIAL Services Review



### Volume 6 Number 1, 1996

#### The Impact Of Inflation On ROE, Growth And Stock Prices (pp. 1-17)

#### Frank K. Reilly

Using the constant growth dividend discount model (DDM), it can be shown that the critical factor which determines whether common stocks will be able to be an inflation hedge is the growth rate of dividends. In turn, the growth of dividends is mainly impacted by the aggregate return on equity (ROE). Using the DuPont formula it is clear that the main variable that drives the aggregate ROE is an inflationary environment is the profit margin. Following from this background, this article updates and extends an earlier analysis that involves an analysis of ROE and its components for the 40-year period 1956-1995. The analysis demonstrates that the aggregate ROE is currently at about the same level as in the 1960's, but the components have changes - i.e., there has been a decline in total asset turnover and profit margin. It is further shown that there have been periods of high and low inflation since 1956 and the negative impact of inflation on the implied growth rate is confirmed, which helps explain why investigators find consistent empirical results that common stock are poor inflation hedges.

# The Congressional Calendar And Stock Market Performance (pp. 19-25)

#### Reinhold P. Lamb, K.C. Ma, R. Daniel Pace, William F. Kennedy

This study reports on the existence of a curious calendar effect - a relationship between stock market performance and the schedule of the United States Congress. Almost the entire advance in the market since 1897 corresponds to the periods when Congress is in recess. This is an impressive result, given that Congress is in recess about half as long as in session. Furthermore, average daily returns when Congress is not meeting are almost eight times greater than when Congress is in session. Throughout the year, cumulative returns during recess are thirteen times that experienced while Congress is in session.

## Short Selling And Trading Abuses On NASDAQ (pp. 27-39)

Timothy R. Smaby, Robert L. Albert Jr., H. David Robison

We examine the potential for short-selling trading abuses unique to Nasdaq during a period when there was no uptick rule and no effective prohibitions against "naked" short selling. We find that (1) short sellers earned significant abnormal returns on Nasdaq securities, but these were smaller than on NYSE/AMEX securities; (2) they did not destabilize markets by selling into falling markets and exacerbating price drops; and (3) Nasdaq short sellers may be more susceptible than MYSE/AMEX shorts to "short squeezes". Our results cast doubt on the appropriateness of recent regulatory reforms established for Nasdaq and public concern over Nasdaq short-selling abuses.

## **Financial Planning And College Savings Recommendations:** Let's Set Things Straight (pp. 41-52)

#### Thomas H. Eyssell

Continuing increases in the cost of higher education, along with an ever-changing financial aid environment, suggest that financial planning is more important than ever for those seeking to send a child to college. One commonly used aid to the financial planner is the "college savings table", which is ubiquitous in both the popular press, as well as the literature geared toward financial planners. Although they are intended to simplify the planning process, some of these tables may lead to misallocation of family resources. The tables generally purport to show how much money parents must save monthly to fund four years of college at a specified future date. We demonstrate that these tables often employ flawed methodology. Upon correction (and given reasonable assumptions abut investor behavior, growth rates in tuition costs, and investment yields), the monthly savings necessary to fund a given level of college expenses can be substantially less than those reported.. Additionally, published tables typically provide the planner with a limited range of investment yield assumptions, suggesting a narrow range of portfolio possibilities. We provide a series of tables which allow the financial planner to estimate required savings for various combinations of investment yields and tuition growth rates.

## Adverse Selection, Search Cost And Sticky Credit Card Rates (pp. 53-67)

#### O. Felix Ayadi

Several scholars of financial economics observed that during the 1980s, market interest rates declined continuously with little or no impact on credit card rates. Recently, Meyercord (1994), Sinkey and Nash(1993) and Sullivan and Worden (1995) recorded significant changes in the credit card market indicating an increased level of competition. This study represents an attempt to determine the sensitivity of credit card rates to the costs of funds in the U.S. economy. The evidence from the Johansen Cointegration test confirms that credit card rates and cost of funds possess a long-run equilibrium relationship with one another. Furthermore, the results of the error correction models are indicative of a sluggish rate at which credit card interest rates adjust to the costs of funds. Between 1982 and 1994, credit card rates adjust to changes in the cost of funds at about 15 percent per quarter. These results represent anecdotal evidence for the validity of adverse selection, search and switch costs explanations that have been discussed in the financial contracting literature.

## **Personal Bankruptcy Costs: Their Relevance And Some's Estimates** (pp. 77-96)

#### James S. Ang, Ali M. Fatemi

The paper argues that there is a need for the formal treatment of personal bankruptcy costs in the finance literature. The need arises out of the relevance of such costs to both corporate and personal financing decisions. We show that (a) personal bankruptcy costs (like personal taxes) are relevant to the corporate capital structure problem and that (b) differential bankruptcy costs across corporations and individuals can result in a clientele model of individual investment-borrowing decisions which could lead to institutional arrangements designed to minimize combined bankruptcy costs. Further, we develop a theory of personal bankruptcy costs are reported which suggest that they are higher than corporate bankruptcy costs. There is also some evidence of economics of scale in personal bankruptcy costs.

## An Application Of Fuzzy Set Theory To The Individual Investor Problem (pp. 97-107)

#### Manuel Tarrazo

This study reviews the problem of the individual investor and applies to it a methodology based on fuzzy sets and the theory of possibility. The investment decision is characterized by uncertainty, imprecision and complexity, which lessen the effectiveness of conventional calculus and probability tools. In contrast, fuzzy set theory and its modeling language provide objects of analysis and algebra that are well suited to this problem. New concepts such as "fuzzy portfolio weights" are introduced. The result of our research is a qualitative, general, and practical model for individual investors' decision making, which is based on Smith's (1974) asset-mix model.

## The Use Of Professional Designations In The Real Estate Industry (pp. 109-124)

#### Susan Logan Nelson, Theron R. Nelson

A series of surveys investigates the recognition by consumers of professional designations in a variety of financial services fields, but with an emphasis on the real estate industry. The results from the 1991, 1994 and 1996 surveys are consistent in revealing a general lack of recognition by consumers of professional designations, with the notable exception of the CPA. The CFP© and CLU also fared somewhat better than the real estate designations examined both in terms of consumer recognition and perceived competence of those holding the designation. Consumers, however, exhibited a generally strong desire for dealing with professionally designated individuals when making financial decisions.

## An Overview Of Financial Services Resources On The Internet

(pp. 125-140)

#### Brian Grinder

Individual financial decision making is a process requiring a great deal of information, most of which can be found on the Internet if one knows where to look. This paper is a guide to recent financial service developments on the Internet that allow academics, students, professionals, and consumers to find information, interact with others, and conduct financial transactions online. It also offers an extensive list of financial service Internet sites, and provides a glimpse into the future of financial services on the Internet.

## **Conversions Of Mutual Savings Institutions: Do Initial Returns From These IPOS Provide Investors With Windfall Profits?** (pp. 141-150)

#### Julie A.B. Cagle, Gary E. Porter

We examine initial returns of fully underwritten IPOs of converting thrifts for evidence that managers and depositors of conversion-related offers earn significantly greater returns than investors in IPOs of other financial institutions. Regulators have suggested that new guidelines for conversion from a mutual to a stock thrift are designed to curb "windfall profits" earned by insiders investing in conversion-related IPOs. While there are reports of average initial returns of more than 20% for conversion-related IPOs, our results suggest that investors earn average initial returns of about 7%, which is not significantly different than returns from IPOs of other thrifts and commercial banks.

#### Volume 6 Number 3, 1997

## Incorporating Historical Investment Performance in Projecting Life Insurance Cash Values (pp. 155-167)

#### S. Travis Pritchett

The projection of current investment experience in life insurance sales illustrations during the historically high interest rate environment of the 1980's in the U.S. has led to consumer dissatisfaction and lawsuits against life insurers and agents. As interest rates fell after 1985, insurers were unable to credit returns near the maximums illustrated earlier. New regulations still allow projections at essentially the latest current investment returns, along with showing guaranteed and intermediate values. The question raised in this article is: Can history help the financial planner determine a range of credible investment return assumptions for determining cash values? Conclusions are based on the results of basing projections on historical investment experience.

## Performance Persistence in Money Market Fund Returns(pp. 169-183)

#### Dale L. Domian, William Reichenstein

We study the factors affecting the cross section of net returns of money market mutual funds from 1990 through 1994, and the persistence of relative returns across years. We find that the expense ratio is the most important factor in explaining differences in net returns. Government-only funds produce slightly lower returns than other-taxable funds, and economies of scale are evident only for the smaller funds. Money funds' relative returns show strong persistence. Most funds maintain stanle expense ratios, so low-cost funds produce consistently high relative returns.

#### Market Knowledge in Managed Municipal Bond Portfolios (pp. 185-196)

#### Sandeep Singh, William H. Dresnack

In this paper, we analyze the investment performance of two types of open-end municipal bond mutual funds: first, mutual funds that have the objective of generating income free from federal income taxes; second, funds that have the objective of generating income free from not only federal but also a particular state's income taxes. Our results suggest the following: first, municipal bond funds monthly returns either mirror or lag the Lehman Brothers Municipal Bond Index returns on a risk-adjusted basis; second, when state taxes are significant, such as in California and New York, the investor benefits from investing in state-specific municipal bond funds.

## The Challenges and Opportunities of Student-Managed Investment Funds at Metropolitan Universities (pp. 197-200)

#### Douglas R. Kahl

The number of student-managed investment finds has grown rapidly in recent years. In the four decades since the first student-managed investment find was established at Gannon University, the number of such and has grown at a rate of less than one per year to thirty-four in 1993. However, that rate of growth has changed dramatically in recent years. Oak Associates Ltd., the Akron, Ohio based investment-management company, has funded ten student-managed investment finds since January 1996. The fund established by Oak Associates Ltd. at The University of Akron provides students with the opportunity to learn about investing real money on a real-time basis. The Oak Grant provides significant educational opportunities at the University and some real challenges in the organization and management of the finds.

### Asset Allocation and Investment Horizon (pp. 201-219)

#### Keith V. Smith

Quarterly recommendations by national brokerage firms since the third quarter of 1989 provide an opportunity to compare different approaches to asset allocation. To follow a brokerage firm's recommendation every quarter is to

practice tactical asset allocation. Both the length of the investor's decision horizon and brokerage commissions that are incurred when portfolio changes are made impact investment performance, and both contribute to the risk experienced by investors. Buy-and-hold and strategic asset allocation would have served investors better than tactical asset allocation during the first half of the 1990s.

#### Volume 6 Number 4, 1997 (Index Issue)

# An Analysis of the Tradeoff Between Tax Deferred Earnings in IRAs and Preferential Capital Gains (pp. 227-242)

Terry L. Crain, Jeffrey R. Austin

This paper extends prior research in evaluating the decision of whether to invest in a mutual fund either outright or through one of the three available IRAs: the deductible IRA, the Roth IRA, and the nondeductible IRA. We provide mathematical models for after-tax accumulations for each of the investments that are a function of return, the percentage of the return currently taxable to the investor, the time horizon of the investment, the capital gain tax rate, and the ordinary income tax rate. The Roth IRA and the deductible IRA always dominate investments in the nondeductible IRA or through outright investment. However, in comparing the nondeductible IRA and outright investments, the outcome is dependent on the investment goals of the mutual fund and whether it generates substantial dividend distributions or capital gain distributions. Mutual funds with small dividend and capital gain distributions may accumulate larger amounts if held outright while mutual funds that pay substantial dividends or make substantial capital gain distributions accumulate larger after-tax amounts when invested in a nondeductible IRA.

## An Analysis of Nondeductible IRA Contributions and Roth IRA Conversions (pp. 243-256)

#### Stephen M. Horan, Jeffrey H. Peterson, Robert McLeod

An average investors have an income replacement rate of 64 percent of their pre retirement income, which in many cases results in a lower tax rate in retirement. We analyze the impact of declining withdrawal tax rates on the choice between taxable mutual fund investments and nondeductible IRAs. The relative attractiveness of the taxable mutual fund option declines significantly when withdrawal tax rates decline. Converting existing IRAs to Roth IRAs is generally beneficial for investors who remain in the same tax bracket upon withdrawal. For short (long) time horizons and low (high) expected returns, the marginal value of conversion in 1998 is greater (less) than the marginal value of optimal conversion. For investors dropping into the 15 percent tax bracket, conversion is generally not beneficial unless the conversion is done optimally, the time horizon is long, and the expected return is high. Investors in the 15 percent tax bracket should convert existing IRA assets.

## Performance of Mutual Funds Before and After Closing to New

Investors (pp. 257-269)

#### Merman Manakyan, Kartono Liano

This study examines the decision to close mutual funds to new investors due to the growth of the funds' assets. The evidence indicates that funds perform better three years prior to closing to new investors than they do afterwards. Furthermore, the evidence indicates that the closed funds outperform the control portfolios of funds with similar investment objectives and asset size during the one- and three-year periods after closing. However, there is no significant difference in the performance of closed funds and their matched control portfolios during the one- and three-year period after closing. Although the primary reason given for closing the funds is the desire to maintain performance in the face of growing assets, the strategy does not appear successful in accomplishing this objective.

# The Optimal Choice of Index-Linked GICs: Some Canadian Evidence (pp. 271-284)

#### Moshe Arye Milevsky, Sharon Kim

Indexed Linked Guaranteed Investment Certificates (ILGICs), also known as equity linked term deposits, have become quite popular over the last few years. From the consumer's point of view, there are two basic categories of Indexed Linked GIC, the Capped ILGIC and the Participating ILGIC. This paper compares the relative value and appeal of the two ILGIC products from the perspective of the individual investor, using valuation techniques from option pricing theory. We compute the Value per Premium Dollar invested in an ILGICs. Our main conclusions are that ILGICs become less attractive the longer the time horizon of the investor. In addition, participating ILGICs are preferable to capped ILGICs for short term maturities and vice versa for longer maturities. A detailed analysis of two particular Canadian products is provided as an application of the basic concepts. We conclude by demonstrating that Values per Premium Dollar range from 94%-98%, corresponding to a 2%-6% total expense ration on Index Linked GICs.

## A Simple and Effective Trading Rule for Individual Investors (pp. 285-294)

#### Laurie Prather, William J. Bertin

This study advocates the use of a simple trading strategy that is shown to outperform a passive buy and hold the market strategy. Based on prior studies that find long-term stock price responses to economic news, the strategy utilizes the announcement of discount rate changes to predict (and profit from) market movements. Statistical testing indicates that the strategy correctly predicts market movements. Furthermore, the results indicate that the proposed trading strategy produces higher risk adjusted returns than a buy and hold strategy. Thus individual investors may reasonably expect to profit by following this easy to implement trading strategy.