



FINANCIAL ANALYSTS JOURNAL®
EDITOR'S CORNER

Robert D. Arnott
Editor

Is Our Industry Intellectually Lazy?

Part of the mission of the *Financial Analysts Journal* is to stimulate creative thinking about financial analysis, including (to name a few) investment valuation, risk management, fiduciary issues, and asset allocation. Broadly, our mission is to serve the fiduciary needs of the investment community.

The title of this Editor's Corner is deliberately provocative. This issue of the *FAJ* provides ample evidence of creative intellectual effort in the finance world. Yet, I have become increasingly concerned over the last decade that our industry, in general, seems to have lost focus on thoughtful analysis of finance issues. Some of those concerns can be illustrated by a series of examples of the "business as usual" attitudes in our industry.

■ *Why does our industry forecast aggregate corporate earnings growth rates that are faster than sustainable GDP growth?* Consensus long-term earnings growth estimates routinely exceed sustainable GDP growth. However, such a future is not possible unless stock buybacks exceed new share issuance, which rarely happens. Otherwise, aggregate earnings would eventually exceed GDP. Even more sobering is that infusions of new equity capital play an important part in GDP growth. GDP growth has two primary engines: the growth of existing enterprises and the creation of new enterprises through entrepreneurial capitalism.¹ Our existing stock market investments allow us to participate in the former but not the latter. Because more than half of real GDP growth comes from entrepreneurial capitalism, real earnings and dividends should collectively grow a bit below half the rate of economic growth. Shouldn't our industry, as a matter of course, question aggressive growth forecasts before acting on them?

■ *Pension accounting 1: Why do we not question pension return assumptions?* The average return assumed for pension assets in computing the "pen-

sion expense" in the United States remains north of 8.5 percent for corporate plans. The *average* discount rate for liabilities, for calculating required contributions, in the public funds community is almost 8 percent. The top of the government yield curve, at this writing, is roughly 5 percent. Stocks are yielding 1.6 percent. So, to earn 8.5 percent over the life of the liabilities, a balanced 60/40 equity/bond portfolio must see long-term earnings and dividend growth above 9 percent on the equities that it holds.² During the 20th century, however, the average long-term nominal growth rate for earnings and dividends was slightly more than 4 percent, of which nearly 3 percent was from inflation. The real growth was only slightly more than 1 percent! Yet, perhaps because of the quarter-century bull market (1975–1999), we apparently are accepting 9 percent as a "reasonable" expectation for growth.³

Suppose we simply used the highest available *assured* nominal return over the life of the liabilities (5 percent today) as the sensible portfolio rate of return. This decrease from current return assumptions would, of course, require higher plan contributions and would result in an earnings decrease of 15–20 percent for the aggregate S&P 500 Index. Unless we want to rely on sustainable long-term returns that are far higher than bond yields or stock earnings yields,⁴ as much as 20 percent of corporate earnings is a fiction, a shifting of expense burdens onto a future generation of corporate management.

■ *Pension accounting 2: Why accept rising return expectations in a rising market?* In 1982, the average pension return assumption was barely 6 percent. This was a time when stock yields were 5 percent and both earnings yields and bond yields were in double digits. By 2000, the average pension return assumption had risen to approximately 9.5 percent, even though stock dividend yields and bond yields were down from 1982 nearly 400 bps and 800 bps, respectively. If a bond manager sees

The Editor's Corner is a regular feature of the Financial Analysts Journal. It reflects the views of Robert D. Arnott and does not represent the official views of the FAJ or AIMR.

yields fall 800 bps, fueling substantial capital gains on top of a substantial initial yield, does he or she assume that the future returns will be better because the bonds exceeded expectations? No, bond investors are grateful for the returns of the past and expect less, not more, in the future.

■ *Pension accounting 3: Why allow actuarial or accounting assumptions to drive investment practice?* Many pension funds are reluctant to increase allocations to bonds because their accountants will “make them” lower their return assumptions, hurting earnings and stock valuation. What is wrong with this picture? The investment decision should be based on relative investment merit, in a context of risk budgeting, not on accountants saying that a lower bond allocation justifies a higher return assumption. A higher return *assumption* does not assure a higher return. If hope is our strategy, we may as well all assume 100 percent return a year (or more!).

■ *Pension accounting 4: Why readily accept return forecasts based on extrapolating the past?* Suppose bonds yielding 8 percent rally to a 4 percent yield and thereby deliver enough capital gain to produce a 15 percent annualized return. Should we assume 15 percent as a future bond return? Of course not. Should we assume continued capital gains of 7 percent a year on top of our new 4 percent yield? Of course not. Yet, much of our industry is wedded to forecasting the future by extrapolating the past.

Returns are for the most part a function of simple arithmetic. For almost any investment, the total return consists of yield, growth, and multiple expansion or yield change. For bonds, the growth is simple: fixed income implies zero growth. For high-yield or emerging market debt, growth can be negative because of the occasional defaults. For stocks, based on very long term history, growth tends to be around 1 percent above inflation.⁵ The 7 percent real returns for the past 77 years, covered in the Ibbotson data, consist of roughly 4.5 percent from dividend yield, just over 1 percent from real dividend growth, and 1.5 percent from multiple expansion (Ibbotson and Chen 2003). So, why expect 7 percent in the future? The U.S. equity yield is currently well under 2 percent. And we probably should not count on resumed multiple expansion because the market is not cheap by any conventional definition. Much of our industry seems fearful of simple arithmetic of this sort.

■ *Pension accounting 5: Why not “normalize” return assumptions?* We could at least take the crude step, when valuing investments, of adjusting earnings forecasts to an average return assumption. Suppose one company assumes a 9 percent return on pension assets and another assumes 6 percent. The former company is clearly not assured a 3 percent higher return on pension assets than the latter. *Hope*

is not a strategy! Nor does a more aggressive return *assumption* create a higher return. Accordingly, wouldn't it make sense to adjust these two companies' earnings to a hypothetical 7.5 percent average return assumption (or even to the more defensible top-of-the-yield-curve 5 percent, which anyone can assuredly earn) so that we do not overestimate the value of one company relative to another?

■ *Why is the topic of expensing management stock options controversial?* Companies maintain two main sets of earnings—tax earnings and earnings based on generally accepted accounting principles. The intent of GAAP earnings is to provide a clearer picture than tax earnings of company health and wealth from the perspective of the shareholder. Although management stock options cost the company nothing, they cost the shareholders (in the form of dilution) dollar for dollar the same as a like-sized check written to management. I am not opposed to stock options. I think entrepreneurial rewards should be available to management teams that can produce entrepreneurial rates of growth for their shareholders. Stock options can align management and shareholder interests and can help recruit entrepreneurial talent to established companies. But I am opposed to the fiction that stock options are free; they are a transfer of wealth from external shareholders to internal shareholders.⁶

■ *When various “earnings” figures diverge, why not ask why?* When reported earnings, operating earnings, tax earnings, and earnings before interest, taxes, depreciation, and amortization (EBITDA) diverge, we should want to know the reason. Our industry should more often challenge those companies that show biannual write-offs of “extraordinary” items. Similarly, a reliance on EBITDA implies that depreciation and amortization will not be needed in the future, hence that reinvestment in a company's future will not be needed to maintain competitiveness and to respond to a changing world. Furthermore, failed initiatives and unsuccessful ideas are not “extraordinary” when viewed in the context of the economy as a whole. A reliance on “operating earnings” for the market as a whole implies that the investor expects no mistakes or failed initiatives in the future. Analysts should more closely examine earnings measurement discrepancies in order to better understand their root causes.

■ *Why is a negative equity risk premium considered shocking?* No law assures us that we will earn a positive risk premium. Yet, the notion of a negative equity risk premium seems almost scandalous to our industry. Consider that even the most aggressive views in academia would not support long-term earnings or dividends growth that is faster than the economy. Given this truism, it is hard to imagine that stocks can offer a positive risk premium when they are yielding 1.1 percent at a time

when inflation-indexed government-guaranteed bonds (commonly known as TIPS) are yielding 4.4 percent—which was the case in January 2000. Was the equity risk premium negative (at least for broad stock market averages) relative to TIPS at the beginning of 2000? I think the risk premium was indeed negative, but few wanted to believe it.

■ *Why is our industry often surprised and distrustful when empirical tests fail to support accepted dogma?* Much of our industry operates on dogma. And much of that dogma is grounded in sound finance theory. But theory is only theory; it tells us what should happen, not necessarily what does happen.

- Modern portfolio theory as developed by Harry Markowitz 50 years ago is sound. Optimization methods based on MPT will maximize return at any given level of risk or minimize risk at any given level of return—as long as the assumptions about return, risk, and covariance are correct forecasts of the future.
- The capital market line of Bill Sharpe's and Jack Treynor's capital asset pricing model defines the correct expectational return of assets based on a nondiversifiable beta relative to a market portfolio—as long as borrowing and lending rates are the same, investors are rational, taxes do not exist, and so forth.
- Miller and Modigliani *proved* that capitalization structure and dividend policy do not matter—in a world of no taxes, rational investors, no transaction costs, and corporate managers who operate solely in the best interests of the shareholders. The Miller-Modigliani theorem has been inaccurately construed intertemporally to

imply that if the market retains more earnings and pays fewer dividends, subsequent earnings growth will offset the lost dividend income.

I have heard academics and practitioners say about any one of the theories, "This is only a theory; the data should not be expected to fit it precisely." Most of the originators of these theories say much the same. But I have *also* heard academics and practitioners contend, "The theory tells us that so-and-so should happen, so we should assume that it will happen." Often, the same person will make both arguments! At an academic conference last year, the speaker began by saying, "Let's assume that the market is not entirely efficient and examine what the behavioral basis for those inefficiencies might be." Several professors in the audience immediately interrupted, saying, "But the market is efficient!" It is fair to say that these attendees did not listen to the rest of the presentation.

Theories help us understand how the world *should* work. There is no harm in finding that the theories are merely an approximation of the real world or in presenting arguments that suggest the world works somewhat differently from the theory. Shouldn't we be open-minded enough to question our own assumptions (even our core beliefs) and subject them to the rigors of empirical testing?

We in our industry, in both the academic and the practitioner communities, are too complacent. Few people are willing to question their basic assumptions. Yet, these basic assumptions often fail when they are tested. Nothing is wrong with assumptions failing; indeed, it is through questioning assumptions that we can search for new ways of understanding the investment world.

Notes

1. See Arnott and Bernstein (2002), Arnott and Asness (2003), and Bernstein and Arnott (2003).
2. To earn 8.5 percent on a 60/40 balanced portfolio in which the bond portion yields 5 percent, the stock portion must deliver a long-term return of 10.8 percent. If stocks yield 1.6 percent, then earnings growth must be 9.2 percent to deliver a rate of return of 10.8 percent on stocks.
3. See Ryan (2003).
4. The earnings yield for stocks is the reciprocal of the stock earnings ratio. It is a measure of how much, in earnings, a company, or the market as a whole, produces for each dollar invested.
5. See Arnott and Bernstein.
6. See the article by Hull and White in this issue.

References

- Arnott, Robert D., and Clifford S. Asness. 2003. "Surprise! Higher Dividends = Higher Earnings Growth." *Financial Analysts Journal*, vol. 59, no. 1 (January/February):70–87.
- Arnott, Robert D., and Peter L. Bernstein. 2002. "What Risk Premium Is 'Normal'?" *Financial Analysts Journal*, vol. 58, no. 2 (March/April):64–85.
- Bernstein, William J., and Robert D. Arnott. 2003. "Earnings Growth: The Two Percent Dilution." *Financial Analysts Journal*, vol. 59, no. 5 (September/October):47–55.
- Ibbotson, Roger G., and Peng Chen. 2003. "Long-Run Stock Returns: Participating in the Real Economy." *Financial Analysts Journal*, vol. 59, no. 1 (January/February):88–98.
- Ryan, Ronald J. 2003. "Pension Fund Management: Addressing the Problem of Asset/Liability Mismatch." In *Improving the Investment Process through Risk Management*. Charlottesville, VA: AIMR.