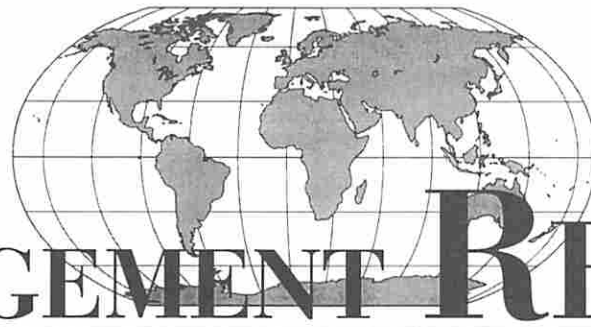


# TAM ASSET MANAGEMENT REVIEW

Modern Investment Principles  
For Serious Investors

June, 1994  
Vol. 2 No. 6



Every client of TAM Asset Management receives a copy of Charles D. Ellis' book *Investment Policy*. This book is one of the most useful, objective, and contemporary sources on prudent investment strategy. It is also less than 100 pages long and very easy to read.

Mr. Ellis is managing partner of Greenwich Associates, the leading consulting firm specializing in financial services worldwide. The author of six books and dozens of articles, he has taught courses at both Yale and Harvard. Ellis earned his B.A. at Yale, an M.B.A. (with distinction) at Harvard and the Ph.D. at New York University.

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## Returns

### *Investment Policy: How to Win the Loser's Game* By Charles D. Ellis (Part 8 of 14)







Investment returns come, as everyone knows, in two very different forms: quite predictable cash received from interest or dividends; and gains or losses in market price that are, particularly in the short run, quite unpredictable. Investors devote most of their time and skill trying to increase returns from changes in market prices—by outsmarting each other. They are making a big mistake.

Changes in market price are caused by changes in the consensus of active investors of what the price of a stock ought to be. This consensus is determined by thousands and thousands of institutions and individuals constantly seeking opportunities for investment profit. To find these opportunities, investors study monetary and fiscal economics and political developments in all the major nations; visit hundreds and hundreds of companies; attend thousands of breakfast, lunch, and dinner meetings with corporate executives, economists, industry experts, securities analysts, and other experts; study reports and analyses produced in enormous volume by hundreds of companies and dozens of large brokerage firms; read extensively in the industry and trade press; and talk almost constantly on the telephone with people who have ideas, information, or insights with which these active investors might improve their investment performance.

In addition to studying the *rational* world, investors also study the

*Continued on next page...*

### Asset Class Returns\* Through May 31, 1994

	<u>United States</u>	<u>YTD 1994</u>
	1-Yr. Bonds	+0.4%
	5-Yr. Bonds	-3.2%
	Large Stocks	-1.0%
	Large Value Stocks	-5.0%
	Small Stocks	+1.7%
	Small Value Stocks	+2.3%
	<u>International</u>	+8.4%
	Large Stocks	+8.4%
	<u>Japan</u>	
	Small Stocks	+34.8%
	<u>Continental Europe</u>	
	Small Stocks	+15.1%
	<u>United Kingdom</u>	
	Small Stocks	+7.0%
	<u>Pacific Rim</u>	
	Small Stocks	-12.3%

There was little change in all of the asset classes for the month of May. U.S. large stocks recovered slightly, but were offset somewhat by their high book-to-market (value) relatives. U.S. small stocks continue to run counter to their big brothers. Their foreign cousins, as you might expect, took the month off for a well-earned vacation.

\*See "Performance Notes" on back page for explanations.

### TAM Portfolio Returns Net of Fees\* Through May 31, 1994

<u>Risk (% stocks)</u>	<u>YTD 1994</u>	<u>1993</u>	<u>Since Inception</u> <u>12/92-5/94</u>
Moderate (65%)	+2.2%	+14.0%	+16.5%
Growth (85%)	+3.4%	+16.6%	+20.7%
Aggressive (95%)	+6.2%	+21.1%	+28.6%
<u>Benchmarks Comparisons</u>			
Balanced Fund Index	-2.0%	+11.7%	+9.4%
Capital Apprec. Index	-3.9%	+14.8%	+10.4%
S&P 500 Stock Index	-1.0%	+10.1%	+8.9%
Salomon Broad Bond Index	-3.5%	+9.9%	+6.0%

\*See "Performance Notes" on back page for explanations.

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*Returns (cont.)*

irrational world of “investor psychology,” public confidence, politics, and “market tone,” because in the short run the markets—and market prices—are very human or nonrational. The ways in which investors perceive and interpret information and the ways they react to developments have great impact on market prices, particularly in the short run. So active investors are always looking for opportunities to capitalize on changes in other investors’ opinions before changes in their own opinions are capitalized on by other investors. Not all of the investors’ interpretations and perceptions are “correct.” Many, particularly in retrospect, seem very wrong.

Investment management in today’s dynamic markets is a wonderful, turbulent, fascinating, hopeful, anguishing, stressful, and euphoric process of competing in the world’s most free and competitive market against many talented and ambitious competitors for advantage gained from greater knowledge and wiser interpretation and better timing. (The irony is that for most investment managers and their clients most of this activity really does not matter—not because these investment managers are not talented, but because so many of their competitors are *equally* talented. It’s not how good you are that counts, but how good you are compared with your competitors.)

For all the surface complexity in the process, two main areas are dominant in the evaluation of common stocks. The first is the general consensus of investors on the probable amount and timing of future earnings and dividends. The second is the consensus of investors on the discount rate at which this stream of estimated future dividends and earnings should be capi-

talized to establish its present value.

The consensus estimates of future dividends and earnings will vary among different investors and at different times due to changes in expectations for secular growth and cyclical fluctuations in unit demand; prices and taxes; discoveries and inventions; changes in the competition at home and abroad, and so forth. And over time, the discount rate considered appropriate will vary with many factors, among which the most important will be the perceived risk of the particular investment or investments of its general type and the expected rate of inflation.

The longer the future period over which estimates—both of earnings and dividends and of the discount rate—must be extended, the greater the day-to-day or month-to-month fluctuations in the stock price that will be caused by changes in the investors’ consensus of present value.

As the time horizon over which an estimate extends is lengthened, the impact of the estimated discount rate becomes more and more dominant (relative to estimates of future earnings and dividends) on the current market price of a security.

For investment value, on the other hand, as the holding period over which the investor owns an investment lengthens, the importance of the discount factor decreases and the importance of the dividends paid increases.

For the very long-term *investor*, the relative importance of earnings and dividends received is overwhelming. For the very short term *speculator*, everything depends on the day-to-day and month-to-month changes in investor psychology (or in more formal terms, the appro-

priate discount rate) and what people are willing to pay. Like the weather, the average long-term experience in investing is never surprising, but the short-term experience is *always* surprising.

The history of returns on investment, as documented in study after study, shows three basic characteristics:

1. Common stocks have average returns higher than bonds, which in turn have higher returns than short-term money market instruments.
2. The daily, monthly, and yearly fluctuations in actual returns on common stocks exceed the fluctuations in returns on bonds, which in turn exceed the fluctuations on short-term money market instruments.
3. The magnitude of the period-to-period fluctuation in rate of return increases as the measurement period is shortened and decreases as the measurement period is lengthened. In other words, rates of return appear more normal over long periods of time.

The really impressive characteristic of investment returns is that the *variation* in year-to-year rates of return on common stocks dwarfs the average annual rate of return on stocks.

We now know that it is nonsense to say, “Common stocks have produced an average rate of return of 9 percent.” This is an incomplete and misleading statement. Over the past 50 years, the actual returns have been between a *loss* of 43 percent, and a *gain* of 54 percent. While the geometric mean rate of return is about 9 percent, the standard deviation of actual returns

*Continued on next page...*

*Returns (cont.)*

around that mean is nearly 22 percent.

And finally, we regret to say we cannot give you the sequence with which those returns will be experienced. They, of course, occur at random.

The two statements are remarkably different from one another—particularly for the investor who is suddenly and unexpectedly experiencing the most dreadfully negative year in what was so serenely described as the “normal” bell-shaped distribution. That’s why investors and investment managers are learning to describe investment returns in statistical terms.

In addition to learning the importance of describing the distribution of returns around that mean, we have also learned to separate out the different components in the average rate of return and to analyze each component separately.

There are three main components in the average rate of return:

1. The risk-free rate of return.<sup>1</sup>
2. A premium over the risk-free rate of return to offset the expected erosion of purchasing power due to inflation.
3. A premium over the inflation-adjusted risk-free rate of return to compensate investors for accepting market risk.

Dividing total returns into these three classes of return makes it possible to compare the returns of each type of investment—stocks, bonds, and bills. This work has been done in a series of landmark studies by Roger Ibbotson and Rex Sinquefeld, and the accompanying table from their book shows their major findings for the 55-year period 1926-90 (see Figure 6-1). The analysis is very informative.<sup>2</sup>

Treasury bills appear quite safe and reliable—in nominal terms, not adjusted for inflation—with

positive returns in 54 of 55 years. However, when adjusted for inflation, returns are positive just less than 60 percent of the time: Even more impressive, the average annual rate of return on bills, after adjusting for inflation, is zero.

In other words, Treasury bills are usually no more than a haven from inflation. Most of the time, you do get your money back—with its purchasing power intact. But that is all you get. There is virtually no real return *on* your money, just the return *of* your money.

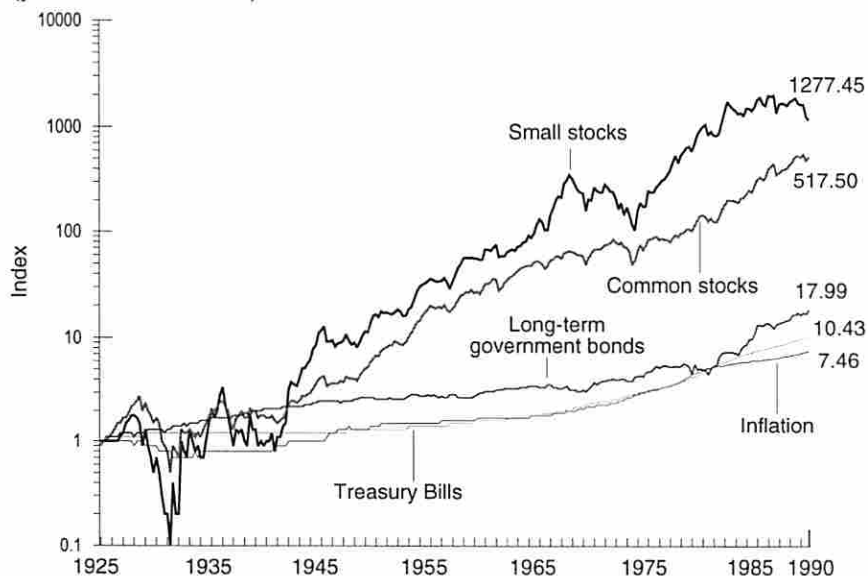
Long bonds produce higher returns, inflation adjusted, for two reasons: corporate bonds involve a risk of default; and both corporate and government bonds impose on the investor an exposure to market fluctuations due to their more distant maturity. Investors don’t want such market price fluctuations unless they get a higher rate of return to compensate, so long bonds pay a higher rate of interest—a maturity premium. The maturity premium is estimated at 0.9 percent and the default premium on high-grade long-term corporate bonds works out at 0.5 percent. Adding these two premiums to the risk-free rate, the inflation-adjusted annual real rate of return on long government bonds is 1.0 percent and on long corporates, about 1.4 percent.

Similarly, the risk premium on common stocks is calculated at 6.1 percent, and the inflation-adjusted rate of return is, congruently, also 6.1 percent.

When the powerfully disruptive impact of inflation is removed, and when return experience is examined in reasonably long time periods, it becomes clear how consistent investment returns really are.

*Continued on next page...*

**FIGURE 6-1**  
Wealth Indexes of Investments in the U.S. Capital Markets 1925-1990  
(year-end 1925 = 1.00)



Source: *Stocks, Bonds, Bills, and Inflation 1991 Yearbook*, Copyright © 1984-1991 Ibbotson Associates, Inc. All Rights Reserved. Stocks, Bonds, and Inflation and SBBI are service marks of Ibbotson Associates.

## Returns (cont.)

This consistency stems from two main factors:

1. Investors are sensibly consistent in requiring higher rates of return to compensate them for accepting higher market risk.
2. As the period over which returns are measured is lengthened, the short-term volatility in returns caused by changes in the discount rate becomes less and less important and the expected dividend stream, which is more stable, becomes more and more important.

The central point is that we do not have and cannot hope to get perfectly precise or "correct" data on rates of return from investments in securities—any more than we can expect to get "correct" data by sampling any other complex, dynamic, continuous process, impacted by a multitude of large and small exogenous factors. However, we can get a very useful *approximation* of what returns have actually been and what they are most likely to be—and that is all we really need to establish basic investment policies for the long term.

Unless the investor buys in at the start of the period measured, sells out at the end, and takes his or her money out of the market, performance data are simply statistics. They describe samples from a continuous and very long-term process in which stock prices go through a "random walk" series of successive approximations of the actual pre-

sent value of each stock based on continuously revised estimates of future earnings dividends and frequently changed capitalization rates (or discount rates).

Two further propositions on returns are important. First, the impact on returns of changes in the expected level of inflation can be enormous, particularly on common stocks which are virtually perpetuities. Such a change in the expected rate of inflation from approximately 2 percent in 1960 to approximately 10 percent in 1980 (along with other changes) caused a change in the required nominal average rate of return from common stocks from about 9 percent in 1960 to about 17 percent in 1980, and this produced a major reduction in stock prices. Inflation adjusted, the loss investors experienced during the adjustment was the worst in half a century.

A further increase in the expected rate of inflation would have further depressed stock prices. This would drop stock prices down to the level from which buyers would get sufficient returns—with the same future "real" earnings and dividends as previously expected—to offset the now expected rate of inflation, compensate for risk, and provide a risk-

free real rate of return of "about 6 percent plus or minus 12 percent in two out of three years." A decrease in the expected rate of inflation would have the opposite effect, as we saw in 1982-85.

The second proposition on returns is that differences in rates of return that may appear moderate in the short run can, with compounding, multiply into very large and quite obvious differences in the long run. (When asked what he considered man's greatest discovery, Albert Einstein replied without hesitation: "Compound interest!")

The following table shows the compounding effect on \$1.00 invested at different compound rates compounded over different periods of time (see Figure 6-2). It's well worth careful study—particularly to see how powerful is time. That's why *time* is the "Archimedes' lever" of investment management.

**FIGURE 6-2**  
Compound Interest over Time

Compound Rate of Return	Investment Period		
	5 Years	10 Years	20 Years
20%	\$2.49	\$6.19	\$38.34
18	2.29	5.23	27.39
16	2.10	4.41	19.46
14	1.93	3.71	13.74
12	1.76	3.11	9.65
10	1.61	2.59	6.73
8	1.47	2.16	4.66
6	1.34	1.79	2.65
4	1.22	1.48	2.19

### Performance Notes:

**Asset Class Returns**—United States: 1-Yr. Bonds = DFA One-Year Fixed Income Portfolio; 5-Yr. Bonds = DFA Five-Year Government Portfolio; Large Stocks = Vanguard 500 Index Fund; Small Stocks = DFA 9-10 Small Company Portfolio; Small Value Stocks = DFA Small Cap Value Portfolio. International: Large Stocks = 57% Vanguard Pacific Index Fund, 43% Vanguard Europe Index Fund (approximates the return of the Morgan Stanley EAFE Index). Japan: Small Stocks = DFA Japanese Small Company Portfolio. Continental Europe: Small Stocks = DFA Continental Small Company Portfolio. United Kingdom: Small Stocks = DFA United Kingdom Small Company Portfolio. Pacific Rim: Small Stocks = DFA Pacific Rim Small Company Portfolio.

**TAM Portfolio Returns Net of Fees**—These are the actual returns of TAM portfolios in each risk category net of actual TAM management fees, custodial fees, and fund expenses. The "Growth" returns were calculated using a model portfolio from 12/31/92 to 4/30/93. The "Aggressive" returns were calculated using a model portfolio from 12/31/92 to 3/31/93. In both cases, the maximum TAM fee was deducted, representative custodial costs were deducted, and all mutual fund returns are net of expenses. Past performance is no guarantee of future returns. This is especially the case with model portfolios which are not subject to specific economic or market factors. **Benchmarks**—Balanced Fund & Capital Appreciation Fund Indexes: Lipper Analytical's indexes representing the 30 largest balanced mutual funds and 30 largest capital appreciation mutual funds in the country.