INVESTMENT GUIDE

Published Monthly by

American Investment Services, Inc.

Vol. XXII, No. 10 | Great Barrington, Massachusetts 01230 | October 31, 2000

In this issue:

Growth and Inflation

Not so long ago, the consensus of the economics profession was that economic growth above some "sustainable" level (typically given as 2 1/2%), would create shortages and bottlenecks that would lead to price inflation. Accelerating price increases would then, it was believed, force the Federal Reserve to choke off growth with tight money and high interest rates.

Economic growth has been reported at rates in excess of 4% per year for most of the 1990s without a significant acceleration of reported price inflation. This has been explained as a reflection of productivity growth, which has enabled employers to increase wages without increasing their labor costs per unit of output.

It should be noted, however, that the numerator of the measures of productivity is constant dollar output. This means that both the unexpected phenomenon, sustained growth rates well in excess of 2 1/2% with little increase in price inflation, and its explanation, higher productivity, could vanish if the rate of price inflation was understated.

The preliminary estimate of total output of goods and services in the United States for the third quarter was 7.7% more than during the third quarter of 1999, and is subject to revisions based on additional and more complete data. However, such estimates are probably as accurate as is humanly possible. There are simply too many people involved in the collection and compilation of the National Income and Product Accounts (NIPAs) for a plot to "cook the books" to remain secret for long. The problem lies in determining how much of that 7.7% increase reflected higher prices, how much reflected higher spending, and how much of that higher spending was for better and entirely new products. This is not a simple question to answer.

The current official estimate is that prices increased 2.3% from a year earlier and that spending increased 5.3%. The latter estimate involves adjustments for quality changes. The notion being that, say, the change in the cost of a car may reflect features that improve the vehicle's serviceability, performance, or convenience, as well as changes in the price of the basic product. Such adjustments are subjective and arbitrary, and they may have become even more so during the past 10 years of rapid technological change. For example, the speed and memory capacity of computers has increased markedly and continues to do so. This fact is reflected in the rapidly decreasing computer prices used to compile the "real" GDP estimates, but it may not be evident in the dollar price that someone who only uses a personal computer for word processing and e-mail (who may not use or need the faster speed and larger memory) will pay to replace his machine.

We do not pretend to have better answers to these kinds of questions, but it is clear not only that they are central to how we view our economic performance, but also that they are generally ignored in popular discussion. Consider, for example, how different the current election campaign or debate over Federal Reserve policy would be if the components of 7.7% nominal growth were reversed—2.3% economic growth and price increases of 5.3%.

Subscription: $49 per year. American Investment Services, Inc. is wholly owned by the American Institute for Economic Research.

QUARTERLY REVIEW OF INVESTMENT POLICY

The table below provides our currently recommended asset allocations. These are of necessity given in relatively broad ranges because individual circumstance can vary. The ranges are given according to the size of portfolios as well as the investor's situation in life.

Our current allocations are defensive in nature: they include substantial holdings of cash and cash equivalent assets and some gold related assets as a form of insurance against a rapid acceleration of price inflation or severe financial disruption. Recommended equities include bluechip U.S. common stocks and well managed, low-cost mutual funds that can enable even those with relatively small portfolios to achieve diversification and participation in all sectors. We have made a few changes to these allocations since our last review. In several instances we have trimmed our recommended exposure to common stocks and increased holdings of cash and cash equivalent assets.

For investors who want individualized management of their assets, we offer two discretionary management services: Our Professional Asset Management (PAM) service covers all of our recommended assets, and allows us to place trades in stocks, bonds, and mutual funds directly in our clients' accounts. (The accounts remain the property of our clients at all times—we are only authorized to trade on their behalf.) Our High-Yield Dow (HYD) service operates similarly, except it invests strictly in the highest-yielding Dow stocks, using the 4-for-18 model on a fully invested basis. Investors interested in these low-cost services should contact us at 413-528-1216 or Fax 413-528-0103.

U.S. Economy

According to the preliminary estimate of the Department of Commerce, the economy grew at a rate of 2.7 percent during the third quarter. This was less than half of the upward revised rate of 5.6 percent now reported for the second quarter. The lower growth rate was widely hailed as evidence that the economy was responding to the increases in short-term rates implemented by the Federal Reserve Board, starting about a year ago, and that further rate increases will not be forthcoming.

Nominal (current dollar) GDP during the third quarter was an annualized $10,063 billion, 7.7 percent more than during the third quarter of 1999. This was the first time that the annualized output of the U.S. economy exceeded $10 trillion. Despite the reported slowing of growth during the third quarter, constant-dollar GDP then was 5.3 percent more than it was during the comparable year-earlier period. This implies that prices increased only 2.3 percent during the latest 12-month period.

As discussed on the front page of this issue, there are grounds to question the accuracy of the official allocation of nominal (current-dollar) growth between higher prices and "real" (constant-dollar) economic growth. However, not even the most skeptical commentator on this question has suggested that the rate of price inflation has grown larger than the rate of nominal GDP growth (i.e., no one believes that the economy is now contracting).

Although they have weakened somewhat, and could weaken further during the months ahead, the statistical indicators of business-cycle changes followed by AIER suggest continued expansion is more probable than contraction during the next few months. However, this could change quickly, as AIER observed (*Re-*

Recommended Portfolio Allocations

General Circumstances and/or Age Span	Type of Investment Assets	Total Investment Capital Available: $50,000	$100,000	$250,000	$500,000	$1,000,000
Assumption	**Dollar Claims**	**60-75%**	**55-65%**	**50-60%**	**40-60%**	**35-55%**
of	Money Mkt.	45-55%	35-40%	30-35%	20-35%	15-30%
Family	Sht. & Int. Bonds	15-20%	20-25%	20-25%	20-25%	20-25%
Responsibilities	**Stocks**	**15-45%**	**20-55%**	**25-60%**	**35-60%**	**35-60%**
And Forming	Value	15-40%	15-40%	25-40%	30-40%	30-40%
a Financial	Growth	0-5%	5-10%	0-15%	5-15%	5-15%
Plan	Foreign	0%	0-5%	0-5%	0-5%	0-5%
(Ages up	Income	0%	0%	0%	0%	0%
to 45-55)	**Gold Related**	**0-5%**	**0-5%**	**0-5%**	**0-5%**	**5-10%**
Meeting	**Dollar Claims**	**55-75%**	**50-65%**	**45-60%**	**40-55%**	**35-55%**
Family	Money Mkt.	35-50%	30-40%	25-35%	20-25%	15-25%
Responsibilities	Sht. & Int. Bonds	20-25%	20-25%	20-25%	20-30%	20-30%
for Children and	**Stocks**	**20-40%**	**20-50%**	**25-55%**	**30-60%**	**35-60%**
Aging Parents	Value	15-20%	15-30%	20-30%	25-40%	30-40%
and Preparing for	Growth	5-10%	5-10%	5-15%	5-15%	5-15%
Retirement	Foreign	0-5%	0-5%	0-5%	0-5%	0-5%
(Ages 45-55 to	Income	0-5%	0-5%	0-5%	0%	0%
Retirement)	**Gold Related**	**0-10%**	**5-10%**	**5-10%**	**5-10%**	**5-10%**
Emphasizing	**Dollar Claims**	**55-75%**	**50-65%**	**50-65%**	**40-55%**	**35-55%**
Safety	Money Mkt.	25-35%	20-25%	20-25%	15-20%	10-20%
and Income	Sht. & Int. Bonds	30-40%	30-40%	30-40%	25-35%	25-35%
and	**Stocks**	**20-45%**	**25-55%**	**25-55%**	**30-60%**	**35-60%**
Estate	Value	15-20%	15-25%	15-25%	20-35%	30-35%
Planning	Growth	0-5%	5-10%	5-10%	5-10%	5-10%
while	Foreign	0-5%	0-5%	0-5%	0-5%	0-5%
In	Income	5-15%	5-15%	5-15%	5-10%	0-10%
Retirement	**Gold Related**	**0-5%**	**0-5%**	**0-5%**	**5-10%**	**5-10%**

search Reports, October 23):

> The leading indicators reflect business commitments and expectations respecting labor, product, and financial markets and thus are considered a barometer of future economic activity. However, the ratio of the index of coincident (which tracks the current movements of production and sales) to the index of lagging indicators (which tracks the costs of production and consumption) forms an alternative leading index. This coincident-to-lagging index tends to confirm—or raise doubts about—the apparent trends shown by the leading indicators.
>
> In recent months the index has leveled off and begun to deteriorate—as would be expected if structural imbalances were beginning to develop in the economy.
>
> In short, although our two diffusion indexes for the leaders still indicate that continued expansion is more probable than contraction (at least for the next several months), the recent behavior of the coincident-to-lagging index suggests marked uncertainty in that outlook. The economy may well be headed for a "soft landing." But it may not. Only further data will provide more reliable indications of the eventual outcome—and in the current statistical circumstances, the probabilities favoring expansion or contraction could change very quickly.

The "statistical circumstances" mentioned include the fact that only four of the twelve leaders are appraised as expanding (with only 3 clearly so), while three series are clearly contracting and the status of five series is indeterminate.

One of the things that has helped boost the U.S. economy has been the apparently insatiable appetite of foreigners for dollars and other U.S. assets. This has not only financed our continuing record trade deficits, but also helped sustain domestic investment (capital formation and replacement) even as the reported levels of personal savings by U.S. consumers has decreased to zero. Capital markets have also been bolstered by the retirement of publicly held Treasury debt securities.

As the late Herbert Stein was fond of observing, "a trend that is not sustainable will not be sustained." One day, the rest of the world's appetite for dollars will diminish. Whether this will be because the U.S. market becomes less attractive for portfolio and direct investment, because foreign central bankers find that their reserves need to be diversified away from dollars, because the investment climate abroad improves relative to the United States, or some combination of these reasons cannot be determined at this time. However, that it eventually will happen seems assured.

Gold

One of the first signs of a movement away from the dollar might well be a strengthening of the gold price. However, there have been few signs of this happening to date as new mine production and central bank sales have gone almost entirely into fabrication, including traditional heavy "Asian" jewelry (a form of hoarding, because the gold content is the main attraction).

The price of gold has remained in a trading range below $300 per ounce. Any sustained upward movement in the gold price would appear to require a return of investment demand to the market from which it has been largely absent for many years. Such a return of investment demand would reflect a movement away from the dollar and other U.S. assets.

The Euro

The economy of Euroland (the countries that share the euro as a common currency) has lagged behind that of the United States. Unemployment remains close to 10% despite economic growth of slightly over 3%.

To date, the rationalization and efficiencies that had been expected from the introduction of a common currency have not materialized or, at least, have not been able to make much of a dent in the various self-imposed inefficiencies of European economies. These include labor market rigidities, regulations, bureaucratic "turf wars," and other legacies of socialism.

As a result, the European Central Bank (ECB) has been reluctant to raise interest rates. This has no doubt exacerbated the slide of the euro against the dollar. From a level of $1.17 at the time of its introduction at the start of 1999, the dollar price of the euro has steadily decreased. It hit a new low of less than $.83 late in October, despite some official intervention in its support earlier this autumn.

At some point the euro will find a bottom, and when it does it could signal the beginning of the end not only of the relative ease with which the U.S. trade deficit has been financed but also of the re-

GOLD FIELDS LIMITED

Gold Fields Limited recently reported gold production of 973,000 ounces for its first fiscal quarter 2001 ended September 30, which was 6% more than during the previous quarter. Unit cash costs remained steady at about $206 per ounce. Because of extraordinary items, the timing of tax payments, and a slightly lower gold price, net earnings for the quarter decreased to R0.44 per share from R0.69. In U.S. dollar terms, this translated into first fiscal quarter 2001 earnings of $0.06 per share compared to $0.10 per share for the June quarter.

The company has indicated that any resurrection of the Franco-Nevada merger "is deemed unlikely," although the merger agreement between the two companies remains in effect until December 31, 2000. The company is considering a number of alternatives to the merger. One possibility would involve a spin-off of the company's interests in the Tarkwa gold project located in Ghana, and the Outokumpu platinum joint venture in Finland. These non-South African operations are expected eventually to produce 600,000 ounces of gold and 250,000 ounces of platinum annually. Gold Fields estimates that Tarkwa will need to raise $150 million to finance its third phase mine expansion. Outokumpu is still in the development stage.

The company has yet to announce its year-end cash dividend (usually declared and paid by the end of summer) and no announcement or payment is expected before year-end, when Gold Fields will have no further obligations to Franco Nevada. No decision has been announced as to how the company plans to pay the deferred year-end June 30 dividend or the first half 2001 dividend which is normally announced with the December 30 financial report. The company is considering a "special" dividend payment, possibly shortly after year-end, and a regular first half 2001 dividend on the regular schedule. The company has not ruled out one payment after year-end combining dividend payments for the two periods.

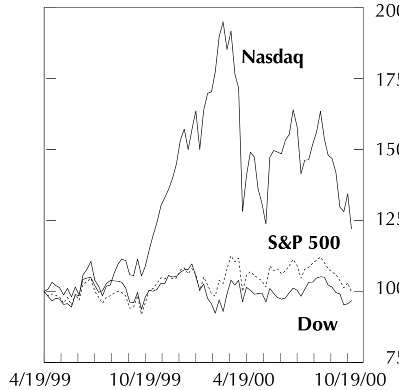
straint that low import prices place on domestic producers' ability to raise prices.

A Soft Landing?

In short, there are reasons to question whether the widely-heralded "soft landing" will occur, i.e. whether the economy will settle back into steady growth with low price inflation. A falling dollar, a rising gold price, and accelerating price inflation could greatly complicate the problems faced by Alan Greenspan and the Federal Reserve Board. If the economy continues to slow down, the usual response would be to reduce interest rates. But, in the current condition of international markets, this could create other problems, to which a "hard landing"—a recession, especially if it occurs early in the next President's first term—might take a back seat.

Fixed Dollar Claims

We should stress that the foregoing analysis of the economic outlook focuses on trends that have yet to manifest themselves. For the moment, the safest and most stable place to put funds is dollars, which should form the largest component of one's portfolio. Roughly half should be held in money market funds (currently paying 5.5% or more) which can be quickly mobilized to take advantage of



any investment opportunities as they arise.

To enhance and stabilize income, the remainder should be placed in bonds of relatively short duration (under 5 years). In large portfolios some bonds may be purchased directly (buy treasuries or issues rated Aa or better). Otherwise, investors should use one or more of our recommended bonds funds (indicated with a ★ on the back page).

Equities

As indicated in the Chart, the major stock price indexes (the Dow Jones Industrial Average and the S&P 500) have fluctuated in a relatively narrow range during the past 18 months or so, despite unprecedented volatility. The "tech heavy" NASDAQ index is in the process of correcting from what appears to have been a classic speculative "bubble" that only began a little over a year ago. (Prior to then, fluctuations of the NASDAQ series seldom took it very far from the other major indexes.)

While maintaining caution, we continue to recommend that our High Yield Dow stocks comprise the major component of an investor's commitment to equities. These issues have had something of a bear market of their very own during the past 18 months or so, and from mid-September to mid-October the value of our top 4-for-18 month portfolio decreased more than 15%, the second largest one-month decrease in our database (second only to a more than 20 percent decrease in October 1987). The portfolio has since recovered from that decline. Even so, current dividend yield and price/earnings ratios of our HYD stocks make them substantially cheaper than most large capitalization stocks. This should make them more likely to do well if investors begin to seek out bargains and value.

As we discussed in some detail last month, we are also recommending that investors begin to make commitments to growth stocks in a cautious and gradual fashion. We believe that the best way to do this is via one or more of our recommended mutual funds, rather than by trying to pick tomorrows individual "winners."

SMALL IS BEAUTIFUL

In the July issue of ***INVESTMENT GUIDE*** we introduced the notion of modern portfolio theory. We have evaluated a variety of asset classes to assess their efficacy in enhancing the potential risk-adjusted returns for investors' portfolios. Our recommendations include cash and cash equivalent assets, gold-related assets, short and intermediate-term bonds, large cap value stocks, large cap growth stocks, foreign stocks and utilities. The table on page 74 presents recommended allocations for investors of various circumstances. We are now adding small cap stocks to that list (these should be considered as part of the value stock category in the table; our reasoning is explained below).

Our research is based on empirical research into the historical patterns of monthly returns provided by a variety of asset classes. Our recommendations include assets that have provided returns that have been positive, but not highly correlated with one another, over time. Therefore, by adding assets that have very high returns over time, even though they have been highly volatile, a portfolio's expected returns could be improved without increasing the expected volatility of the portfolio.

The Small Cap Effect

We have been working with a database provided by the Center for Research in Security Prices (CRSP), and with research conducted by economists at the University of Chicago and Dimensional Fund Advisors (DFA). This research supports our contention that a large cap value approach (such as the Dow high-yield stocks) is an important part of a well-diversified portfolio. We have now concluded that the very smallest of small cap stocks are also appropriate for many portfolios.

Through 1981, the CRSP database ranks all issues listed on the New York Stock Exchange (NYSE) by market capitalization in descending order and then breaks that list down by decile (e.g., decile 1 includes those stocks that comprise the largest 10% of NYSE listed stocks). After 1981, non-NYSE issues were included in the decile into which they would belong if they were listed on the NYSE. The non-NYSE stocks (i.e., stocks listed on the American Stock Exchange or over-the-counter) tend to have smaller market capitalizations than "Big Board" listed issues. Therefore, the deciles, in this analysis, do not contain either an equal number of stocks or equal amounts of market capitalization, but rather something in between.

The historical returns and volatility of these deciles have been thoroughly studied. As indicated in Table 1, small cap stocks have provided a significant return premium to "the market" as measured by the Standard & Poor's 500 Index (large cap stocks), although investors would have had to accept in-

Table 1

1926-1999	*Annualized Total Return*	*Standard Deviation*
U.S. "Micro Cap" Stocks	12.63 %	35.26 %
S&P 500	11.35 %	22.13 %

creased volatility in the process.[1] Small cap stocks are defined here as the 9th and 10th deciles of the NYSE through 1981. After 1981 the figure reflects the results for the DFA U.S. Small-Cap Portfolio, a mutual fund that concentrates on issues (including ASE and NASDAQ stocks) with capitalizations that would place them in the 9th and 10th deciles of NYSE stocks. Some would call these "micro-cap" stocks.

What should make micro-cap stocks especially attractive to investors, however, is not just their relatively small potential return premium; but rather the fact that the returns to micro-capitalization issues are not strongly correlated with those of large stocks. In Table 2 we present market returns by quintiles. Large stocks (quintile 1) and micro-cap stocks (quintile 5) provided the greatest "swings" in terms of gains and losses over three-year rolling periods, but most importantly, these swings were not correlated. For example, between 1967 and 1969, micro-caps averaged over 27% annually, while large caps managed only 7.53%. Conversely, between 1988 and 1990, micro-caps lost 2.59% while large caps gained 13.25%. No one can predict these patterns of relative performance in advance, but investors can maximize their potential returns while minimizing volatility by holding both these groups. The charts below make the same point.

Table 2
Small and Large Stocks: Highest and *Lowest* Returns
(Annualized Rolling Three-Year Returns (%))

Size Quintile	*1*	*2*	*3*	*4*	*5*
1928-30	**-3.51**	-13.26	-13.14	-21.86	*-26.15*
1931-33	*-5.99*	1.12	-3.09	2.98	**8.85**
1934-36	*26.06*	29.02	37.16	44.41	**56.49**
1937-39	**-5.53**	-7.88	-8.13	-12.77	*-20.47*
1940-42	*-0.31*	1.98	2.25	3.32	**5.61**
1943-45	*29.32*	39.85	47.46	61.50	**84.31**
1946-48	**0.15**	-3.05	-3.45	-7.15	*-7.40*
1949-51	24.81	23.98	*23.45*	**25.33**	24.74
1952-54	19.59	19.77	**20.03**	17.95	*17.30*
1955-57	**7.41**	4.04	3.61	2.63	*2.11*
1958-60	*17.81*	22.82	21.57	23.38	**24.48**
1961-63	**10.93**	9.17	*6.55*	9.70	7.12
1964-66	*6.57*	12.08	13.62	12.74	**14.66**
1967-69	*7.53*	12.58	17.61	19.98	**27.09**
1970-72	**11.45**	9.03	7.23	3.74	*-0.12*
1973-75	**-5.89**	-6.18	-10.42	-10.27	*-10.47*
1976-78	*7.27*	15.69	22.98	27.77	**33.54**
1979-81	*16.84*	22.95	24.94	24.62	**25.56**
1982-84	14.92	15.44	16.72	**16.73**	*13.79*
1985-87	**18.07**	15.77	11.91	9.82	*4.02*
1988-90	**13.25**	11.80	6.61	6.52	*-2.59*
1991-93	*17.00*	23.26	29.81	26.85	**32.35**
1994-96	**18.47**	15.88	*14.59*	14.68	15.36
1997-99	**25.93**	18.54	*15.43*	16.82	16.09

Despite their inherent volatility, micro-caps have demonstrated resiliency during "bear markets." Between 1966 and December 1982, a very difficult period for most equity investors, the bottom quintile (i.e., the 9th and 10th deciles) of the NYSE by market capitalization provided annualized total returns of 13.86%, while the S&P 500 returned only 5.81% annually.

No Free Lunch

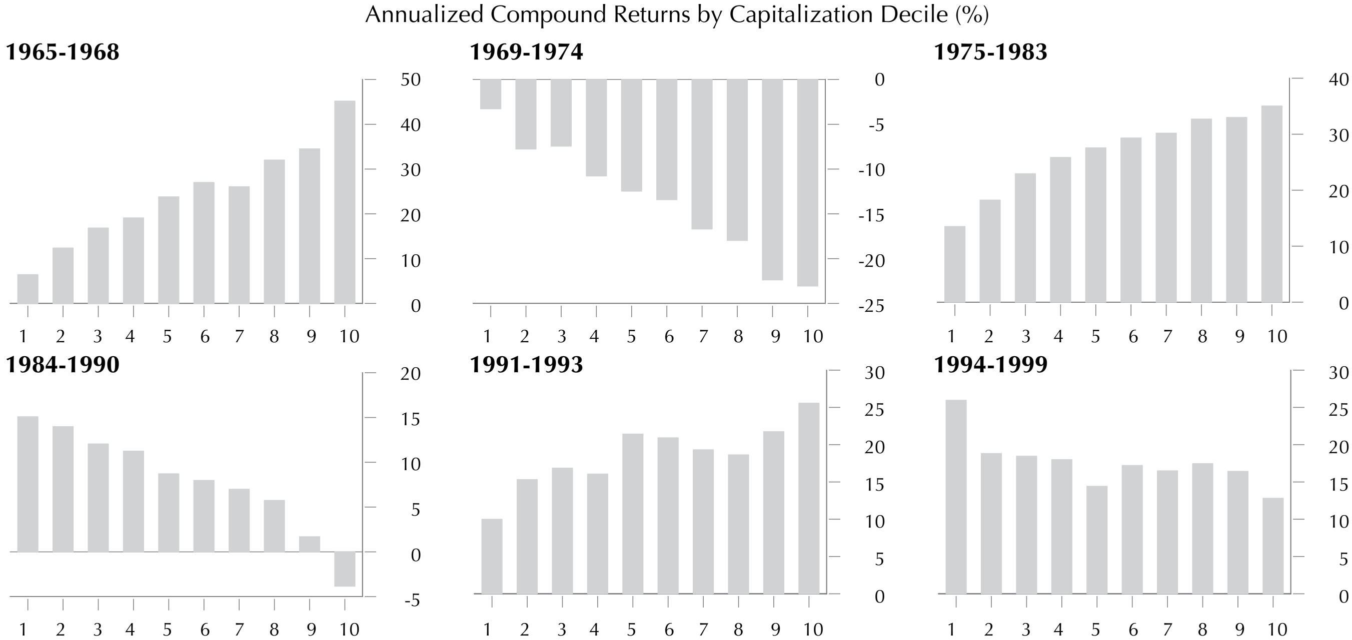
We must emphasize that micro-cap stocks are extremely volatile. In capital markets there is an inevitable trade off between risk and return. Micro-cap stocks, often unproven "concept" stocks with an intriguing product or business plan or older companies in distress, are usually unattractive to investors or lenders unless the potential returns are very high. Just as lenders would demand a high rate of interest for lending to these companies, equity investors require a high expected rate of return (from the firm's perspective, this represents a high cost of capital).

Only investors who have a relatively long investment horizon, who can weather the ups and downs depicted in Table 2, should consider this group, and in terms of our allocation table on page 74, these micro-caps should comprise between 0 and 10% of a portfolio. While Morningstar, Inc. considers the above mentioned DFA fund to be a "blend" of growth and value investing, we have grouped the micro-cap approach as part of the value stock category. By construction, candidates are purchased when they qualify for the smallest deciles, and are sold when they have entered the 7th decile, after their shares have appreciated. The fund has a dividend yield of 2.45% and a price-earnings ratio of 22.5, versus 1% and 35.1, respectively, for the Standard & Poor's 500 Index.

Note that we are not increasing our

[1] Standard deviation is a statistical measure of the average variability of an asset's returns about the mean of those returns. Though an imperfect measure of "risk" it is the most widely used measure of the absolute volatility of returns for financial assets.

History of the Size Effect
Annualized Compound Returns by Capitalization Decile (%)



overall equity allocation. Readers might therefore consider selling some of their Dow stocks in order to reinvest the proceeds in micro-caps.

Why Not Pick the Best Small Stocks?

There are some 883 small cap mutual funds in existence, and innumerable money managers who claim to be adept "stock pickers", but evidence suggests that no one can consistently outperform the small cap market except by luck. Table 3 reveals that the passively managed DFA fund has consistently outperformed the majority of funds in its category.

It is important to note that the average median capitalization of Morningstar's small cap category (small cap blend) for funds that have been in existence for 15 years or more is $855 million, while the DFA 9-10 median market cap is only $156 million. The past 15 years (as demonstrated in Table 2) have favored larger cap stocks, so the DFA fund has outperformed 75% of similar, mostly actively managed funds, despite a built-in disadvantage.

It is a virtual certainty, statistically, that when enough money managers are attempting to pick stocks, some will outperform a passive benchmark simply due to chance, even over extensive time periods. Indeed evidence suggests that the number of stock pickers who have outperformed has been below what would be expected by chance. Moreover, those who have "outperformed" over a given time period are rarely the same individuals who do so over subsequent periods, so investors who select managers on this basis are likely to be disappointed. We believe this is the case with small cap stocks as well.

Investing in Micro-caps

Regrettably, individual investors have very few venues for purchasing micro-caps in an adequately diversified, cost-

ALTERNATIVE HIGH-YIELD DOW INVESTMENT STRATEGY

We are convinced that long-term common stock investors will receive superior returns if they consistently purchase (and hold) higher-yielding Dow stocks from a listing such as that on the opposite page. Selecting from such lists is not a "cut and dried" process, however. Individual circumstances and a variety of ad hoc decisions will perforce determine the timing of purchases and sales.

In our monthly listings, a given issue may retain a ★ or a ☆ for months, even years at a time. As a result, investment (and reinvestment of sales proceeds) in particular stocks will vary with each individual investor. This means that, while it would be possible to calculate total returns (dividends and capital gains) for a specific investor, it is not possible to compute such returns on our recommendations *per se*.

Our parent has exhaustively researched many possible High-Yield Dow approaches, "backtesting" various possible selections from the DJIA ranked by yield for various holding periods. For the 35 years ended in December 1998, it was found that the best combination of total return and risk (volatility) was obtained by purchasing the 4 highest yielding issues and holding them for 18 months. (For a thorough discussion of the strategy for investing in the highest-yielding stocks in the DJIA, please read AIER's booklet, "How to Invest Wisely, with Toward an Optimal Stock Selection Strategy," 139 pp. $9.)

In our model described below, which is distinct from the table on the opposite page, about one-eighteenth of the portfolio is devoted to the 4 issues eligible each month. (We say "about" because various adjustments and rebalancings are needed to ensure that both the composition of the model portfolio and its returns are independent of when it is presumed to have been initiated.) Eligible issues include the 4 highest-yielding Dow issues that are neither General Motors nor Philip Morris. A HYD strategy derives much of its effectiveness because it "forces" the investor to purchase sound companies when they are out of favor and sell them when they return to relative popularity. We exclude GM because its erratic dividend history has usually rendered its relative yield ineffective as a means of signaling timely purchases, especially when it has ranked no. 4 or higher on the list. We have chosen to exclude Philip Morris also, because, in present circumstances, it seem unlikely that there will be sufficient "good news" for it to be sold out of the model portfolio, whatever its ups and downs, unless it is specifically excluded. The hypothetical trades used to compute the composition of the model (as well as the returns on the model and the full list of 30 Dow stocks) are based on mid-month closing prices, plus or minus $0.125 per share.

This month, the strategy sold some Chevron, which is no longer in the Dow, and some Minnesota Mining and J.P. Morgan to buy Caterpillar, A.T.& T., and Dupont. These transactions assume the investor has been following the model for at least 18 months. Investors following the model for less than 18 months would be buying all 4 eligible stocks, using one-eighteenth of their total portfolio each month. Investors can also accumulate portfolios that approximate the model in less than 18 months, by "jumping in" and duplicating the model immediately. However, only investors with sizable portfolios should attempt to track the exact percentages month to month: To avoid excessive transaction costs, investors should adjust their holdings toward the percentages below only when commissions are less than 1% of the value of a trade. By making such adjustments from time to time, investors should achieve results roughly equal to the future performance of the model.

Our **HYD Investment Management Program** provides professional and disciplined application of this alternative strategy for individual accounts. For accounts of $100,000 or more, the fees and expenses of AIS discretionary portfolio management programs are comparable to those of most mutual funds. Contact us for information on this and our other discretionary investment management services.

As of September 15, 2000					*Percent of Portfolio**	
	Rank	*Yield*	*Price*	*Status*	*Value*	*No. Shares‡‡*
Philip Morris	1	6.84%	31.0000	*-0-	-0-	
Eastman Kodak	2	4.52%	38.9375	Holding**	15.1	19.6
Caterpillar	3	4.29%	31.6875	Buying	15.3	24.4
Int'l Paper	4	3.64%	27.4375	Buying	5.9	10.8
A.T.&T.	5	3.57%	24.6250	Buying	2.8	5.8
General Motors	6	3.47%	57.6875	*	-0-	-0-
Dupont	7	3.45%	40.5625	Holding	7.1	8.9
Morgan, J.P.	8	2.78%	143.1250	Selling	27.0	9.6
Minn.Mng.& Mfg.	9	2.55%	91.0000	Selling	12.8	7.1
Honeywell	10	2.17%	34.6250	-	-	-
SBC Communications	11	2.17%	50.1250	Holding	1.8	1.9
Chevron	-	3.09%	84.2500	Selling	8.5	5.1
Goodyear Tire	-	7.55%	15.9000	Holding	0.5	1.7
Sears, Roebuck	-	2.88%	31.9325	Holding	3.2	5.1
					100.0	100.0

Change in Portfolio Value‡

	1 mo.	*1 yr.*	*5 yrs.*	*10 yrs.*	*15 yrs.*	*From 12/63*	*Std. Dev.*
Alt. Strategy	-15.4%	-7.2%	15.7%	19.6%	18.7%	16.2%	18.7
Dow	-6.8%	3.9%	18.2%	18.0%	17.4%	11.2%	16.9

* The strategy excludes Philip Morris and General Motors. ** Indicated purchases approximately offset by sales of shares purchased 18 months ago. ‡ Assuming all purchases and sales at mid-month prices (+/– $0.125 per share commissions) reinvestment of all dividends and interest, and no taxes. The 5, 10 and 15-year total returns are annualized as are the total returns and the standard deviations of those returns since December 1963. ‡‡ Because the percentage of each issue in the portfolio by value reflects the prices shown in the table, we are also showing the number of *shares* of each stock as a percentage of the total number of shares in the entire portfolio. Note: These calculations are based on hypothetical trades following very exacting stock selection strategies. They do not reflect returns on actual investments or previous recommendations of AIS. Past performance may differ from future results.

effective manner. Most of these companies are so small and illiquid that bid-ask spreads and commission costs make direct investments impractical.

The DFA U.S. 9-10 Small Cap Portfolio turns this apparent shortcoming into a significant advantage. In short, when buying these shares, the fund, which has grown to $1.7 billion in assets under management, is often the effective market maker, which creates significant buying leverage. When selling shares the funds managers patiently sell off small portions of holdings, even if the delay risks slightly "missing" the goal of holding only deciles 9 and 10 stocks. This trading advantage is significant; between January 1982 and December 1999 the fund outperformed the actual CRSP 9-10 Index by 1.7% annually.

The DFA 9-10 fund does not purchase master limited partnerships, investment companies, ADRs, REITs, initial public offerings, companies in bankruptcy, or stocks with fewer than 4 market makers.

Table 3
DFA U.S. 9-10 Small Cap Portfolio
Results Through (9/30/2000)

	5-Year	*10-Year*	*15-Year*
Annualized Total Returns	10.48	15.88	12.90
Percentile Rank Within Small Blend Category	59	89	75
Percentile Rank Within Small Value Category	84	88	72

Source: Morningstar Inc.

The annual expense ratio is 0.61% (versus 1.55% for all small cap funds), and annual turnover is only 26%. As of September 30, the fund held 2,836 issues and its 10 largest holdings accounted for less than 4% of its assets.

The DFA funds can only be purchased through a qualified investment advisor. The DFA group carefully screens advisors, partly to avoid the funds of "hot money" investors and money managers attempting to chase the latest returns. This works to the benefit of investors by reducing costs. *We can purchase these funds on behalf of our Professional Asset Management program, please contact us at 413-528-1216 to learn more*.

We have searched for a reasonable substitute to recommend to our readers, but no such funds presently exist. A number of "small cap" index funds are available, but these typically track either the Russell 2000 Index or the Standard and Poor's 600 Index. These indexes largely exclude micro-caps in the 9th and 10th deciles, and focus on much larger stocks. For example the Russell 2000 index is constructed by selecting the 3000 largest U.S. companies by market cap, and then eliminating the largest 1000 of these stocks. At the end of September the Russell 2000 index had a median market cap of $760 million versus $156 million for the DFA 9-10 fund.

Micro-cap stocks are a legitimate part of a well-diversified portfolio for many investors. We will continue to monitor this asset class and publish our findings if we find an alternative to the DFA U.S. Small Cap Portfolio for our readers who are not participants in our PAM program.

THE DOW JONES INDUSTRIALS RANKED BY YIELD

	Ticker Symbol	*Months On/(Off) Top 10*	*— Market Prices —* 10/13/00	9/15/00	10/15/99	*— 12-Month —* High	Low	*— Latest Dividend —* Amount	Record Date	Paid	*— Indicated —* Annual Dividend	Yield† (%)
Philip Morris	MO	92	**$31.00**	27.19	30.56	34.00	18.69	0.530	9/15/00	10/10/00	2.120	6.84
★ Eastman Kodak	EK	25	**$38.94**	62.81	70.88	72.44	39.13 *L*	0.440	12/01/00	1/02/01	1.760	4.52
★ Caterpillar	CAT	18	**$31.69**	37.44	56.06	58.00	29.00 *L*	0.340	10/20/00	11/20/00	1.360	4.29
★ International Paper	IP	11	**$27.44**	30.13	47.38	60.00	27.00 *L*	0.250	8/18/00	9/15/00	1.000	3.64
AT&T	T	5	**$24.63**	32.25	43.19	61.00	23.63 *L*	0.220	9/29/00	11/01/00	0.880	3.57
★ General Motors †	GM	57	**$57.69**	70.00	62.13	94.63	56.56 *L*	0.500	8/11/00	9/09/00	2.000	3.47
☆ DuPont	DD	12/(30)	**$40.56**	40.06	62.44	74.00	38.19 *L*	0.350	11/15/00	12/14/00	1.400	3.45
★ J. P. Morgan	JPM	84	**$143.13**	174.50	105.69	187.63	104.69	1.000	9/25/00	10/13/00	4.000	2.79
★ Minn. Min. & Mfg.	MMM	72	**$91.00**	85.13	89.38	103.81	78.19	0.580	8/25/00	9/12/00	2.320	2.55
Honeywell Intl.	HON	1	**$34.63**	36.50	58.81	64.00	32.13	0.188	8/18/00	9/08/00	0.750	2.17
☆ SBC Comm.	SBC	(1)	**$50.13**	44.25	48.69	55.50	34.81	0.254	10/10/00	11/01/00	1.010	2.01
☆ Exxon Mobil	XOM	(6)	**$90.50**	88.00	72.00	95.44 *H*	69.88	0.440	11/13/00	12/11/00	1.760	1.94
Alcoa (s)	AA		**$25.81**	28.59	30.75	43.63	23.25 *L*	0.125•	11/03/00	11/25/00	0.500•	1.94
Procter & Gamble	PG		**$72.63**	62.50	93.31	118.38	52.75	0.350	10/20/00	11/15/00	1.400	1.93
Merck	MRK		**$76.19**	67.19	70.25	81.13	52.00	0.340	9/01/00	10/02/00	1.360	1.79
Johnson & Johnson	JNJ		**$95.81**	95.00	93.31	106.88	66.13	0.320	11/21/00	12/12/00	1.280	1.34
United Tech.	UTX		**$69.69**	63.94	52.63	72.94 *H*	46.50	0.225	11/17/00	12/10/00	0.900	1.29
Coca-Cola	KO		**$57.19**	50.81	49.94	69.00	42.88	0.170	12/01/00	12/15/00	0.680	1.19
Citigroup * (s)	C		**$49.81**	55.06	42.13	59.13	31.55	0.140	11/06/00	11/22/00	0.560	1.12
General Electric (s)	GE		**$57.00**	56.75	38.58	60.50	38.21	0.137	10/03/00	10/25/00	0.550	0.96
Boeing	BA		**$58.75**	56.88	42.50	66.94 *H*	32.00	0.140	8/11/00	9/01/00	0.560	0.95
McDonald's	MCD		**$28.88**	28.00	41.56	49.56	26.38	0.215	11/15/00	12/01/00	0.220	0.76
Hewlett-Packard	HWP		**$90.63**	103.00	82.75	136.19	52.33	0.160	9/20/00	10/11/00	0.640	0.71
American Express (s)	AXP		**$53.94**	59.31	45.00	63.00 *H*	39.83	0.080	10/06/00	11/10/00	0.320	0.59
Wal-Mart Stores	WMT		**$45.00**	52.00	50.81	70.25	41.44 *L*	0.060	9/15/00	10/10/00	0.240	0.53
Walt Disney	DIS		**$39.75**	39.19	24.06	43.88	23.38	0.210	11/16/99	12/17/99	0.210	0.53
IBM	IBM		**$109.06**	125.00	107.88	134.94	89.00	0.130	8/10/00	9/09/00	0.520	0.48
Home Depot, Inc.(s)	HD		**$36.31**	54.25	45.67	70.00	34.69 *L*	0.040	8/31/00	9/14/00	0.160	0.44
Intel Corp. (s)	INTC		**$40.38**	57.52	35.39	75.81	32.50	0.020	11/07/00	12/01/00	0.080	0.20
Microsoft Corp.	MSFT		**$53.75**	64.19	88.06	119.94	53.00 *L*	0.000	-	-	0.000	0.00
☆ Chevron	CHV	(12)	**$84.25**	90.19	88.31	96.94	69.94	0.650	11/17/00	12/11/00	2.600	3.09
☆ Goodyear	GT	(12)	**$15.90**	22.31	46.19	48.63	15.60 *L*	0.300	11/16/00	12/15/00	1.200	7.55
Sears, Roebuck	S	(12)	**$31.94**	34.69	28.63	43.50	25.25	0.230	11/30/00	1/02/01	0.920	2.88

★ BUY. ☆ HOLD. † Based on indicated dividends and market price as of 10/13/00. *H* New 52-week high. *L* New 52-week low. (s) All data adjusted for splits. • Excludes extras. * Travelers Group merged with Citibank as of 10/8/98 to form Citigroup. ‡ Spinoff of 0.69893 shares of Delphi Automotive per share of GM on 5/29/99.

Note: The count in months for the Top 10 issues indicates how long they have ranked among the Top 10. Issues are recommended for purchase (★) after having been among the Top 10 for 12 or more consecutive months, but this period can be changed if conditions warrant. Issues recommended for retention (☆) had qualified for purchase, but subsequently ranked no. 11 or lower and the monthly count (in parentheses) indicates how long ago they left the Top 10. If an issue became a ☆, but subsequently returned to the Top 10, both monthly counts are shown.

RECENT MARKET STATISTICS

Precious Metals & Commodity Prices

	10/13/00	Mo. Earlier	Yr. Earlier
Gold, London p.m. fixing	**273.25**	272.60	315.75
Silver, London Spot Price	**4.88**	4.87	5.38
Copper, COMEX Spot Price	**0.89**	0.92	0.78
Crude Oil, W. Texas Int. Spot	**34.98**	35.93	22.83
Dow Jones Spot Index	**113.92**	113.39	114.23
Dow Jones-AIG Futures Index	**110.61**	110.35	90.70
CRB-Bridge Futures Index	**230.85**	228.34	206.18

Interest Rates (%)

U.S. Treasury bills -	91 day	**6.17**	6.13	4.81
	182 day	**6.19**	6.19	5.08
	52 week	**6.31**	6.08	5.41
U.S. Treasury bonds -	15 year	**6.02**	6.15	6.52
Corporates:				
High Quality -	10+ year	**7.66**	7.83	7.50
Medium Quality -	10+ year	**8.25**	8.33	8.00
Federal Reserve Discount Rate		**6.00**	6.00	4.75
New York Prime Rate		**9.50**	9.50	8.25
Euro Rates	3 month	**5.07**	5.00	3.45
Government bonds -	10 year	**5.11**	5.15	5.25
Swiss Rates -	3 month	**3.54**	3.47	2.32
Government bonds -	10 year	**3.73**	3.78	na

Exchange Rates

British Pound	**$1.448100**	1.397200	1.670500
Canadian Dollar	**$0.661800**	0.673300	0.670100
Euro	**$0.851900**	0.852700	1.086700
Japanese Yen	**$0.009246**	0.009362	0.009507
South African Rand	**$0.132800**	0.137400	0.162900
Swiss Franc	**$0.563400**	0.559500	0.684100

Securities Markets

	10/13/00	Mo. Earlier	Yr. Earlier
S & P 500 Stock Composite	**1,374.17**	1,465.81	1,247.41
Dow Jones Industrial Average	**10,192.18**	10,927.00	10,019.71
Dow Jones Transportation Average	**2,430.18**	2,671.46	2,855.58
Dow Jones Utilities Average	**388.75**	397.04	294.73
Dow Jones Bond Average	**95.96**	96.81	98.63
Nasdaq Composite	**3,316.77**	3,835.23	2,731.83
Financial Times Gold Mines Index	**645.53**	727.53	1,087.09
FT African Gold Mines	**804.27**	872.09	1,303.60
FT Australasian Gold Mines	**757.64**	819.70	1,229.37
FT North American Gold Mines	**574.67**	664.18	994.33

Coin Prices

	10/13/00	Mo. Earlier	Yr. Earlier	Premium
American Eagle (1.00)	**$277.35**	291.15	328.40	1.50
Austrian 100-Corona (0.9803)	**$264.33**	277.43	311.53	-1.32
British Sovereign (0.2354)	**$67.15**	70.25	77.00	4.39
Canadian Maple Leaf (1.00)	**$277.60**	291.40	327.30	1.59
Mexican 50-Peso (1.2057)	**$326.40**	342.50	384.50	-0.93
Mexican Ounce (1.00)	**$270.50**	283.90	318.70	-1.01
S. African Krugerrand (1.00)	**$275.35**	288.85	324.05	0.77
U.S. Double Eagle-$20 (0.9675)				
St. Gaudens (MS-60)	**$345.00**	360.00	447.50	30.50
Liberty (Type I-AU)	**$675.00**	675.00	675.00	155.32
Liberty (Type II-AU)	**$435.00**	435.00	470.00	64.54
Liberty (Type III-AU)	**$307.50**	335.00	427.50	16.31
U.S. Silver Coins ($1,000 face value)				
90% Silver (715 oz.)	**$3,900.00**	4,200.00	4,400.00	11.77
40% Silver (292 oz.)	**$1,562.50**	1,610.00	1,650.00	9.65
Silver Dollars	**$5,750.00**	5,750.00	6,800.00	52.31

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $273.25 per ounce and silver at $4.88 per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

Selected Mutual Funds

	Ticker Symbol	10/13/00	Month Earlier	Year Earlier	52-Week High	52-Week Low	Distributions Latest 12 Months Income	Capital Gains	Yield (%)
★ Duff & Phelps Utilities Income[1]	DNP	**$9.63**	9.94	9.50	10.75	8.25	0.7800	0.0000	8.10
★ T Rowe Price European Stock	PRESX	**$20.69**	22.11	21.65	25.32	20.69	0.1400	1.9000	0.68
★ Vanguard European Stk Index	VEURX	**$24.82**	26.08	25.17	29.85	24.66	0.5000	0.2000	2.01
☆ Vanguard REIT Index	VGSIX	**$10.92**	11.65	9.93	11.98	9.38	0.8000	0.0000	7.33
★ Vanguard Growth Index	VIGRX	**$35.24**	38.26	33.09	42.38	33.09	0.1580	0.9050	0.45
★ Fidelity Target Timeline 2003	FTARX	**$9.15**	9.11	9.19	9.27	8.88	0.6491	0.0000	7.09
★ USAA Short Term Bond	USSBX	**$9.60**	9.65	9.70	9.74	9.53	0.6408	0.0003	6.68
★ Vanguard Short Term Corp	VFSTX	**$10.56**	10.55	10.56	10.61	10.33	0.6955	0.0000	6.59

North American and Diversified Mining Companies

	Ticker Symbol	10/13/00	Month Earlier	Year Earlier	52-Week High	52-Week Low	Indicated Annual Net Dividends	Payment Schedule	Yield (%)
Agnico-Eagle†	AEM	**$5.56**	6.06	8.94	9.00	5.25	0.020	Annual	0.36
★ Barrick Gold Corp.†	ABX	**$13.94**	15.56	20.63	20.56	13.63	0.220	Semiannual	1.58
Battle Mountain Gold	BMG	**$1.56**	1.81	3.38	3.44	1.50	0.000	-	0.00
Freeport-McMoran C&G, Cl.A	FCXA	**$7.88**	9.13	15.50	18.75	7.38	0.000	-	0.00
★ Homestake Mining	HM	**$4.50**	5.44	9.69	9.75	4.31	0.050	Semiannual	1.11
★ Newmont Mining	NEM	**$14.81**	17.81	26.13	28.38	14.00	0.120	Quarterly	0.81
★ Placer Dome†	PDG	**$8.25**	9.25	14.25	14.25	7.69	0.100	Semiannual	1.21
★ Rio Tinto PLC‡	RTP	**$56.81**	65.94	67.19	97.25	55.75	2.300	Semiannual	4.05

South African Mining Companies, Finance Houses and Investment Trusts

	Ticker Symbol	10/13/00	Month Earlier	Year Earlier	52-Week High	52-Week Low	ADR Net Dividends• and Ex-Dividend Dates				Yield (%)
ASA Ltd.	ASA	**$15.06**	16.69	22.00	22.06	14.94	-	-	-	0.600°	3.47
Anglo American PLC[2]	AAUK	**$51.44**	54.38	54.00	71.00	36.75	4/05/00	1.060	9/20/00	0.580	3.19
★ Anglogold Ltd.[3]	AU	**$17.44**	18.56	28.75	29.25	16.38	2/23/00	0.834	8/09/00	0.538	7.87
Avgold Ltd.	AVGLY	**$3.40**	3.75	7.17	7.50	3.40	No Dividends Declared				
De Beers Consolidated Mines	DBRSY	**$26.94**	26.63	26.75	31.75	18.19	3/29/00	0.675	9/15/00	0.368	3.87
Gencor Ltd.	GNCRY	**$3.22**	3.75	3.83	4.68	2.27	3/29/00	0.041	9/15/00	0.170	6.55
★ Gold Fields Ltd.[4]	GOLD	**$3.06**	3.56	5.69	5.75	2.94	9/15/99	0.045	2/16/00	0.026	2.31

★ Buy. ☆ Hold. (s) All data adjusted for splits. † Dividend shown is after 15% Canadian tax withholding. ‡ Dividend shown is after 15% U.K. tax withholding on a portion of the total. na Not applicable. • Paid or announced last 12 months. ° Total dividend paid in latest 12 months. [1] Closed-end fund—traded on the NYSE. Dividends paid monthly. [2] Anglo American Gold Inv. Co. merger in Anglo American plc. [3] Formerly Vaal Reefs plus interests in Free State, Western Deep, Ergo, Elandsrand and others. 2 ADRs = 1 ordinary share. [4] Gold Fields Ltd. and Driefontonein Consolidated merged to form Gold Fields, Ltd. e Estimated.