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## Fund Shenanigans

Much publicized government investigations into mutual-fund practices have been initiated and a wave of shareholder-initiated lawsuits is sure to follow. The allegations are troubling, as the chicanery in question would benefit institutional short-term traders at the expense of long-term individual investors. We are confident that the funds we recommend are not especially vulnerable to these risks.

There are two practices in question. In one instance, it is alleged that an institutional buyer was allowed to engage in after-hours trading of fund shares. This is clearly illegal. Open-end mutual funds are priced at net-asset value (NAV) at the close of the market, 4:00 PM Eastern time, so a buyer could potentially purchase fund shares after the close at NAV, but also after learning of favorable after-hours news that would clearly have a positive impact the NAV the next day. Another practice, though not illegal, takes advantage of NAVs and time zones. An investor can purchase shares of an international fund shortly before the U.S. close, but at an NAV that reflects the close of Asian markets many hours earlier. If trends in the U.S. market during the day had given a clear indication of the direction of the Asian market upon reopening the next day, the trader could benefit.

Both practices benefit short-term "in-and-out" traders at the expense of longterm "buy-and-hold" investors, because the short-term investor can get in and out before his cash was even put to work in the fund's underlying securities. Thus the fund's NAV might increase, but by something less than the increase that would have resulted had the cash been fully invested. The short-term buyer can sell the next day at the modestly higher NAV, but the long-term investor would suffer to the extent that the NAV was diluted.

We are confident that the open-end mutual funds we recommend from Vanguard and Dimensional Fund Advisors are much less susceptible to these risks than are actively managed funds. Index funds are fairly transparent with regard to deviations between the performance of the fund and the index they seek to replicate, so any trading practices such as those described would be detectable. In addition, Vanguard has stringent trading rules including redemption fees, limited exchange privileges, and early trading deadlines for international funds. Dimensional also has rigid trading deadlines, and it virtually eliminates short-term trading by working only through institutions or investment advisors. By virtue of this "screen" the firm has in the past refused to accept funds from investors if the firm believed that the potential investors intended to employ the funds for short-term or speculative purposes.

These allegations have tarnished the mutual-fund industry's image. We believe that now the distinction between actively managed funds and passively managed funds is more warranted than ever. It is equally clear that a firm's reputation is important, and that investors should thoroughly investigate the trading practices of any fund before investing.

Online: www.americaninvestment.com
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 only in the highest-yielding Dow stocks, using the 4 -for- 18 model on a fully invested basis. Investors interested in these lowcost services should contact us at 413-528-1216 or Fax 413-528-0103.

Retirement plans come in two types. Defined-benefit plans for many years were the only practical means for employers to offer employees a tax-advantaged retirement plan. Over the last several decades, however, defined-contribution plans have emerged as the preferred means of providing retirement benefits. We urge readers who have the ability to contribute to these plans to consider doing so.

Unlike defined-benefit plans, which typically provide a fixed payout upon retirement based on an employee's salary or years of service, the retirement benefit in a defined-contribution plan depends on the market value of the account at the time of retirement. The employer assumes no liability for guaranteeing a specific benefit, and no obligation beyond making any promised contributions during an employee's years of service.

Defined-contribution plans available include profit-sharing plans, employee stock ownership or stock bonus plans (ESOPs), $401(\mathrm{k})$ s, Keogh plans (for the selfemployed), SEPs ("simplified employee pensions"), and 403(b) annuities (tax-sheltered annuities offered by tax-exempt or educational organizations).

In recent years defined-contribution plans have become increasingly popular with employers, largely because their financing is more straightforward and they are subject to fewer regulations than de-fined-benefit plans. Federal pension laws intended to ensure adequate financing and actuarial design of pensions do not
apply to defined-contribution plans, since by definition they are always fully funded.

Defined-contribution plans still must comply with various tax laws, however, to be considered "qualified plans" eligible for favorable tax treatment of contributions. They must comply with vesting, participation and coverage rules that apply to all private pension plans, as well as various laws concerning limits on contributions and proper fiduciary management of funds.

There are advantages to defined-contribution plans. While a participant in such a plan does not have the security of a fixed-dollar benefit, he or she gains the opportunity to realize an enlarged benefit if the fund earns a high return. Fixeddollar benefits provide little "security" of purchasing power in this age of inflation. In addition, defined-contribution plans are more likely to allow you to withdraw your benefits in a lump sum. The funds then can be reinvested in another qualified retirement plan or an Individual Retirement Account (IRA) and continue to increase in value until you retire. Finally, such plans often allow for greater employee management of funds. Most plans allow employees to switch funds from one investment account to another, thereby allowing them to balance risk and return according to their own preference rather than the employer's.

To understand the particular requirements and take full advantage of the options offered by your own pension plan,

## AIS 401 (k) SERVICES

American Investment Services now offers investment consulting services for plan sponsors (employers) that provide $401(\mathrm{k})$ or other retirement plans. We work through a very low-cost "unbundled" approach that utilizes funds from Vanguard and Dimensional Fund Advisors. Under this program:

- We will form recommended (lifestyle) allocations for employees, if they desire, predicated on our passive approach to investing. This tends to take the mystery out of portfolio allocation and encourages participation.
- We will assist in developing your investment policy statement, which is essential for meeting your fiduciary responsibilities as plan sponsor.
- We will provide periodic (annual) employee education. This will emphasize the need to contribute to qualified plans as well as an overview of how to invest wisely.
- We will be available to address employee questions and concerns.
We receive no compensation from any mutual fund or any other entity for recommending a particular product. We are free to choose from hundreds of mutual fund families, and our only consideration is which funds are most likely to meet the investing needs of plan participants.

To learn more about our services, contact us at (413) 528-1216, or aisinfo@americaninvestment.com.
you should obtain a copy of the plan from your employer.

## Three Tax Advantages

One feature common to many definedcontribution plans, and in particular $401(\mathrm{k}) \mathrm{s}$, SEPs, and $403(\mathrm{~b}) \mathrm{s}$, is the salary reduction option or "elective deferral." An elective deferral option allows an employee to choose to have part of his or her salary contributed by the employer to a retirement fund rather than have it paid as cash salary.

If your employer offers the option of salary deferral, you are well-advised to take advantage of it. Earnings that you contribute are not counted in your taxable income (although they are subject to Social Security tax); the interest earned on your invested contribution is tax-deferred; and employers may match your contribution, in full or in part (although they are not required to do so).

To illustrate, suppose you have the option of contributing to a pension plan in which your employer contributes one dollar for every two dollars of salary you elect to contribute. If you contribute $\$ 2,000$ (\$167 per month), you immediately reduce your taxable income by $\$ 2,000$. If your marginal tax rate is 28 percent, you would save \$560 in Federal income taxes. In addition, your employer makes a matching \$1,000 contribution—giving you an instant "return" of 50 percent. If the total \$3,000 investment earns a taxfree return of seven percent, in 20 years it will grow to $\$ 11,600$-a cumulative return of 480 percent on your original investment. Of course, eventually you must pay income taxes on this amount. Even after paying 28 percent in taxes, however, the account would be worth $\$ 8,350$.

On the other hand, suppose you choose not to contribute to your pension plan. The $\$ 2,000$ in earnings is taxed as income, leaving you with $\$ 1,440$ to invest (assuming your tax rate is 28 percent). If you put this money in a conventional savings account where interest earnings are taxed as income, the annual seven percent return would be reduced to a 5.04 percent after-tax return. After 20 years your investment would grow to $\$ 3,850$, less than half the after-tax value of the taxfavored investment.

## Making the Most of Contributions

Unlike traditional pension plans that workers were "automatically" enrolled in,
it is up to you to decide to participate in a salary-reduction plan. Until you take this first step, the potential benefits will be lost. The investment benefits are greatest if you make a habit of contributing part of your earnings every month.

For example, if your were to defer \$1,000 of earnings every year toward a plan providing a matching employer contribution of $\$ 500$, and if these contributions earn a tax-free return of seven percent each year, after 20 years your account would have a value of $\$ 65,800$. Even if there are no matching contributions, your own deferrals would appreciate to $\$ 43,900$. By comparison, if you did not defer the $\$ 1,000$ in wages each year but instead took it as a taxable investment, your investment would grow to just
\$25,100 (assuming a marginal tax rate of 28 percent).

Of course, if your marginal tax rate were higher, the value of the taxable account would be even smaller, since both your take-home wages and the after-tax interest earned on them would be lower. The higher your tax bracket, the more you stand to gain by electing to defer part of your earnings into a qualified pension plan.

The more earnings you defer, the greater your potential tax-related investment gains will be. There are legal limits on how much salary or wages can be deferred each year. The maximum tax-deductible employee contribution depends on the type of plan. For example, in 2003 it was $\$ 12,000$ for

401(k) plans.
If you (or your spouse) contribute to a company plan you may, depending on your income, lose the opportunity to deduct a separate contribution to an IRA from your taxable income. If this is your situation, you should consider the tax consequences of both types of contributions before making either. If you decide to contribute to the company plan, you should put at least as much in it as you would have put in an IRA. This will avoid a situation where you contribute a small amount in your employer's plan ( $\$ 1,000$, say) at the expense of losing the tax benefit of the larger contribution (perhaps $\$ 3,000$ or $\$ 3,500$ if you are 50 years old or over) that you planned to make to your IRA.

## A READER INQUIRES

We received the following inquiry related to our article on SIPC insurance last month.

Last fall I became very concerned with the potential of broker fraud and unauthorized trading in my accounts when I was required to sign a client agreement. The agreement specified that I would agree to arbitration in the case of fraud and that it would be my responsibility to immediately notify the brokerage house of any discrepancy that occurred in my account; otherwise they would have no responsibility to correct the account. Further it would be at their option as to whether or not they would make me whole if a discrepancy occurred. The broker incorrectly told me that SIPC insurance covered me for such errors. When I inquired with the SIPC's legal department I was informed that they do not cover broker fraud or discrepancies caused by the brokerage house. I discussed broker fraud with one of the brokerage houses and was told that the bro-
ker would loose his licenses if fraud occurred and therefore no fraud would occur. I therefore moved my accounts to houses that do not put time limits on a client reporting an error.

It seems brokerage houses try to protect themselves from their own employees' errors via their client agreements. I am now at houses that don't always provide the best service and prices but I feel more secure with their client agreements. Am I wrong or is there protection I don't know about? How can an investor protect himself?

You are absolutely correct that SIPC provides no protection against broker fraud or unauthorized trading. Most financial institutions protect themselves by maintaining fidelity bonds, but only legal action initiated against the firm will trigger policy coverage, and it covers the firm, not you, the investor.

Securities and Exchange Commission (SEC) regulation is the main safeguard against broker fraud. The twin goals of securities regulation are generally described as protecting investors and promoting the efficiency of the market. The SEC has received a good deal of criticism in the wake of recent scandals involving broker-dealers and mutual-funds companies. Despite the heat the agency has generally done a very good job in its role as industry watchdog. The threat of SEC enforcement is a powerful deterrent to abuse.

We analyzed several account agreement forms and found that, without exception, they stipulated that disputes would be settled through an arbitration process. None, however, put the onus on the account holder to report the fraud within a prescribed reporting period.

The best ways to protect yourself against broker malfeasance is to put your assets with a reputable firm, read the fine print, and review your account

statements regularly.

## SIPC Update

Last month's article on SIPC stated that
domestic U.S. insurance companies would no longer offer excess SIPC coverage. We can report that TD Waterhouse, one of the firms we utilize
in our Professional Asset Management program, has arranged insurance for up to $\$ 150$ million per customer account through Lloyd's of London.

## SMALL-CAP STOCKS: AN UPDATE

$\mathbf{S m a l l}^{\text {map stocks have continued to }}$ perform well since we first recommended them in October 2000. Our recommendation then, as now, was based on a review of historical asset-class performance rather than an attempt to identify an asset class that we thought was about to become "hot." The data suggests that longterm investors can benefit from holding small-cap stocks as part of a well diversified portfolio strategy.

Our assessment of asset-class performance was derived from a monthly returns database maintained by the Center for Research in Securities Prices (CRSP). For data 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 one includes those stocks that comprise the largest 10 percent of NYSE listed stocks). After 1981, non-NYSE issues were added by including them in the decile that they would belong in 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 did not contain either an equal number of stocks or equal amounts of market capi-

talization, but rather something in between. Beginning in July 2001, the CRSP was again adjusted to include all NYSE and non-NYSE stocks, and ranked by market capitalization in descending order and separated into deciles.

The historical returns and volatility of these deciles have been thoroughly studied. As indicated in Chart 1, small-cap stocks have provided significantly greater returns than Standard \& Poor's 500 Index (large-cap stocks), although investors would have had to accept increased volatility in the process. Small-cap stocks are represented as the fifth capitalization quintile (bottom 20 percent) of stocks in the CRSP database. After 1981 that fig-
ure reflects the results for the DFA U.S. Micro-Cap Portfolio, a passively managed mutual fund that concentrates on issues (including ASE and NASDAQ stocks) with capitalizations that would place them in the fifth capitalization quintile of the CRSP database. Because they are so small, these "micro-cap" stocks account for the lowest four percent of the market's entire capitalization.

What should make micro-cap stocks especially attractive to investors, however, is not just their relatively small potentialreturn premium, but also the fact that the returns to micro-capitalization issues are not strongly correlated with those of large stocks. In Table 1 we show market returns by quintiles. Large stocks (quintile one) and micro-cap stocks (quintile five) 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 1966 and 1968, micro-caps averaged over 40.6 percent annually, while large-caps managed only 7.9 percent. Conversely, between 1987 and 1989, micro-caps returned only 4.3 percent while large-caps gained 16.7 percent. No one can predict these patterns of relative performance in advance, but investors can maximize their potential returns while minimizing vola-

Chart 2: History of the Size Effect, Total Returns by Capitalization Decile (\%)

## 1969-1974



1975-1983


1984-1990

tility by holding both groups. Chart 2 makes the same point.

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 of the NYSE by market capitalization provided annualized total returns of 13.9 percent, while the S\&P 500 returned only 5.8 percent annually.

## No Free Lunch

We must emphasize that microcap stocks are extremely volatile. In capital markets there is an inevitable trade off between risk and return. Mi-cro-cap stocks are often new issues of unproven, "concept" companies with an intriguing product, technology or business plan or older companies in distress. These stocks 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 1, should consider this group. And in terms of portfolio allocation, these mi-cro-caps should comprise no more than 10 percent of a portfolio. We have grouped the micro-cap approach as part of the value-stock category since, by construction, candidates are purchased when they qualify for the smallest 4th percentile of the market-capitalization universe and sold after their shares have appreciated above the 5th percentile of the market universe.

## Why Not Pick the Best Small Stocks?

According to Morningstar, Inc., some 1,322 small-cap mutual funds exist (smallcap growth, blend and value combined). Innumerable money managers claim to be adept stock pickers, but, as with largecap stocks, the evidence suggests that no one can consistently outperform the small-cap market average.

It is important to note that the average median capitalization of Morningstar's small-cap category is $\$ 928$ million, while the DFA Micro-Cap Portfolio median market capitalization is only $\$ 231$ million.

It is a virtual statistical certainty that

Table 1

Small-Cap and Large-Cap Stocks: Highest and Lowest Returns
(Annualized Rolling Three-Year Returns (\%))

| Size Quintile | 1 | 2 | 3 |  | 4 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1927-1929$ | $\mathbf{1 8 . 3}$ | 10.2 | 6.5 | 1.3 | 5 |
| $1930-1932$ | $\mathbf{- 2 9 . 8}$ | -31.1 | -32.6 | $\underline{-35.5}$ | $\underline{-1.0}$ |
| $1933-1935$ | $\underline{35.6}$ | 47.7 | 54.6 | 68.0 | $\mathbf{8 6 . 7}$ |
| $1936-1938$ | $\mathbf{4 . 2}$ | 2.7 | 4.1 | 1.2 | $\underline{0.8}$ |
| $1939-1941$ | -5.5 | -5.2 | $\mathbf{- 4 . 2}$ | -4.7 | $\underline{\underline{-9.8}}$ |
| $1942-1944$ | $\underline{23.0}$ | 28.3 | 36.4 | 47.3 | $\mathbf{7 7 . 5}$ |
| $1945-1947$ | 10.9 | 12.7 | 13.1 | 11.3 | $\mathbf{1 5 . 6}$ |
| $1948-1950$ | $\mathbf{1 7 . 0}$ | 16.7 | 16.9 | 16.2 | $\underline{19.4}$ |
| $1951-1953$ | $\mathbf{1 2 . 0}$ | 9.8 | 7.5 | 6.5 | $\underline{2.3}$ |
| $1954-1956$ | $\mathbf{2 6 . 2}$ | 25.8 | 27.1 | $\underline{25.5}$ | $\mathbf{2 7 . 8}$ |
| $1957-1959$ | $\underline{13.7}$ | 16.2 | 15.4 | 17.8 | $\mathbf{1 9 . 2}$ |
| $1960-1962$ | $\mathbf{5 . 8}$ | 5.3 | 1.6 | 2.0 | $\underline{1.2}$ |
| $1963-1965$ | $\underline{16.9}$ | 19.8 | 22.1 | 22.2 | 22.2 |
| $1966-1968$ | $\underline{7.9}$ | 15.9 | 22.5 | 28.0 | $\mathbf{4 0 . 6}$ |
| $1969-1971$ | $\mathbf{1 . 9}$ | 0.9 | -2.6 | $\underline{\mathbf{- 7 . 7}}$ | 0.6 |
| $1972-1974$ | $\mathbf{2 . 2}$ | -15.3 | -18.8 | -21.3 | $\underline{\mathbf{- 2 5 . 4}}$ |
| $1975-1977$ | $\underline{17.8}$ | 31.5 | 37.3 | 44.9 | $\mathbf{4 7 . 2}$ |
| $1978-1980$ | $\underline{19.3}$ | 24.9 | 28.2 | 31.4 | $\mathbf{3 3 . 2}$ |
| $1981-1983$ | $\underline{10.6}$ | 17.4 | 20.4 | 19.2 | $\mathbf{2 2 . 7}$ |
| $1984-1986$ | $\mathbf{1 9 . 6}$ | 15.1 | 13.5 | 10.9 | $\underline{4.4}$ |
| $1987-1989$ | $\mathbf{1 6 . 7}$ | 16.1 | 12.8 | 10.9 | $\underline{4.3}$ |
| $1990-1992$ | $\underline{11.6}$ | 12.9 | 15.5 | 11.8 | 11.7 |
| $1993-1995$ | 14.8 | 14.8 | 14.8 | 14.8 | $\mathbf{1 5 . 9}$ |
| $1996-1998$ | $\mathbf{2 5 . 9}$ | 16.6 | 12.6 | 14.8 | $\underline{10.6}$ |
| $1999-2001$ | $\underline{0.2}$ | 5.9 | 7.1 | 11.0 | $\mathbf{1 5 . 2}$ |
| $2000-2002$ | $\underline{\mathbf{- 1}} \mathbf{1 3 . 1 6}$ | -9.9 | -8.8 | -6.6 | $\mathbf{0 . 9}$ |

off small portions of holdings, even if the delay risks missing the goal of holding only stocks among the smallest 4 percent of the market's total capitalization. This trading advantage is significant; between January 1982 and December 2001 the fund outperformed its bogey, the CRSP 910 Index, despite charging for the costs associated with running the fund.

The DFA U.S. Micro-Cap Portfolio fund does not purchase master limited partnerships, investment companies, ADRs, REITs, initial public offerings, companies in bankruptcy, or stocks with fewer than four market makers. The annual expense ratio is 0.56 percent (versus 1.64 percent for all small-cap funds), and annual turnover is only 19 percent (versus 104 percent for all small-cap funds). As of June 30 the fund held 2,842 issues and its 10 largest holdings accounted for roughly 2.7 percent of its assets, versus 20.6 percent
when enough money managers attempt 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 will invariably be disappointed. We believe this is the case with small-cap stocks as well. Over the past 12 months the DFA U.S. Micro-Cap Portfolio has outperformed 88 percent of the small-cap blend funds in existence. Over three, five, and 10 year spans it has outperformed 59 percent, 79 percent, and 87 percent of small-blend funds, respectively.

## Investing in Micro-caps

Individual investors have very few avenues for purchasing micro-caps in an adequately diversified, cost-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. Micro-Cap Portfolio capitalizes on these apparent barriers. The fund is often the effective market maker for micro-cap stocks, giving it significant buying leverage. When selling shares the funds managers patiently sell
for the category.
The DFA funds can only be purchased through a qualified investment advisor, however, the DFA funds have very low expense ratios (comparable to those of Vanguard), so that even when combined with advisory fees many readers might find the DFA funds to be a valuable addition to their portfolios. 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 through our Professional Asset Management program. Please contact us at (413) 528-1216 to learn more.

We have searched for a reasonable alternative to recommend to our readers. A number of small-cap index funds are available that track an established small cap index. However, these indexes largely exclude micro-cap stocks and focus on much larger stocks. For example the S\&P 600 Small-Cap Index had a median market capitalization of $\$ 794$, versus $\$ 176$ million for the DFA U.S. Micro-Cap Portfolio. Nevertheless, these indexes can provide a reasonable means of adding stocks that are far smaller than the high-yield Dow stocks. For this purpose, we currently recommend the Vanguard SmallCap Value Index fund, which targets the MSCI US Small-Cap Value Index and the iShares Small-Cap 600 Value Index. These are listed on page 72 .

We are convinced that long-term, common-stock investors will receive superior returns on the "large-capitali-zation-value stock" component of their holdings when they consistently hold the highest-yielding Dow stocks. The fact that a given company's stock is included in the Dow Jones Industrial Average is evidence that the company is a mature and well-established going concern. When a Dow stock comes on the list of the highest-yielding issues in the Average, it will be because the company is out of favor with the investing public for one reason or another (disappointing earnings, unfavorable news developments, etc.) and its stock price is depressed. A High-Yield Dow (HYD) strategy derives much of its effectiveness because it forces the investor to purchase sound companies when they are out of favor and to sell them when they return to relative popularity.

Selecting from the list will not be cut and dried if the timing of purchases and sales reflects individual prejudices or other ad hoc considerations. These usually come down to "I'm not going to buy that" or "goody, this fine company has finally come on the list and I'm going to load up." Our experience with investing in the highest-yielding Dow stocks has shown that attempts to "pick and choose" usually do not work as well as a disciplined approach.

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, they found that the best combination of total return and low risk (volatility) was obtained by purchasing the four highestyielding 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", \$12.)

The model portfolio of HYD holdings set forth in the accompanying table reflects the systematic and gradual accumulation of the four highest-yielding Dow issues, excluding General Motors and Altria (formerly Philip Morris). 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 exclude Altria because, in present circumstances, it seems unlikely that there will be sufficient "good news" for it to be sold out of the portfolio. For more than eight years, Altria has never ranked lower than fourth on the list, whatever its ups and downs, and, given the circumstances, using Altria in the strategy amounts to a buy-and-hold approach. The HYD strategy, to repeat, derives much of its superior performance from buying cheap and selling dear.

In the construction of the model, shares purchased 18 months earlier that are no longer eligible for purchase are sold. The hypothetical trades used to compute the composition of the model (as well as the returns on the model and on the full list of 30 Dow stocks) are based on mid-month closing prices, plus or minus $\$ 0.125$ per share. Of the four

As of September 15, 2003

|  | Rank | Yield | Price | __Percent of Portfolio* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Status | Value | No. Shares ${ }^{1}$ |
| Altria Group | 1 | 6.70\% | 40.60 | * |  |  |
| Eastman Kodak | 2 | 6.46\% | 27.85 | Holding** | 21.70 | 22.40 |
| SBC Comm. | 3 | 4.90\% | 23.06 | Buying | 21.48 | 26.77 |
| General Motors | 4 | 4.85\% | 41.25 | * |  |  |
| AT\&T | 6 | 4.27\% | 22.26 | Buying | 13.45 | 17.36 |
| JP Morgan Chase | 5 | 4.00\% | 33.97 | Holding** | 29.33 | 24.81 |
| DuPont | 7 | 3.18\% | 44.07 | Selling | 11.97 | 7.81 |
| CitiGroup | 8 | 3.17\% | 44.16 |  |  |  |
| Merck | 9 | 2.79\% | 53.09 |  |  |  |
| Exxon Mobil | 10 | 2.67\% | 37.51 |  |  |  |
| Caterpillar | 15 | 2.03\% | 69.00 | Selling | 2.04 | $\underline{0.85}$ |
|  |  |  |  |  | 100.0 | 100.0 |

Change in Portfolio Value ${ }^{2}$

|  |  |  |  |  |  | From | Std. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | 1 mo. | 1 yr. | 5 yrs. | 10 yrs. | 15 yrs. | $12 / 63$ | Dev. |
| Strategy | $2.14 \%$ | $25.22 \%$ | $5.58 \%$ | $12.59 \%$ | $15.89 \%$ | $15.57 \%$ | 19.41 |
| Dow | $11.87 \%$ | $28.13 \%$ | $7.17 \%$ | $13.10 \%$ | $13.86 \%$ | $10.72 \%$ | 17.14 |

[^0]formance of the model.
The process of starting to use the strategy is not as straightforward. The two most extreme approaches are: 1) buy all the indicated positions at once or 2) spread purchases out over 18 months. Either choice could be said to represent an attempt at market timing, i.e., buying all at once could be construed as a prediction that (and will look good in retrospect only if) the prices of the shares go up after the purchases are made. On the other hand, if purchases are stretched out and stock prices increase, the value of the investor's holdings will lag behind the strategy's performance. We believe that most attempts to time the market are futile, and the best course lies somewhere in between the extremes.

Some portion of the shares now held in the strategy will be sold within a few months. The shares most likely to be sold are those whose indicated yields are too low to make them currently eligible for purchase. This usually means that their prices have risen (and their
yields have fallen), in relative if not absolute terms, since they were purchased. If such stocks are purchased now and are sold within a few months, the investor will receive only a portion of the profit, or sustain a greater loss, than the strategy. On the other hand, if the stocks not currently eligible for purchase are bought and the strategy does not call for selling them soon, it will usually be because their prices have decreased so that their indicated yields render them again eligible for purchase. In other words, buying a stock that is not currently among the top four means that it will very likely be sold during the months ahead (perhaps at a gain, perhaps not, but with payment of two commissions either way). Alternatively, if the price decreases so that the issue again becomes eligible for purchase, then the investor's initial purchase would be likely to be held in the portfolio at a loss for some period of time. In the latter situation, the investor would have been better off waiting.

Accordingly, for new HYD clients, we usually purchase the complement of the currently eligible stocks without delay. (This month, the four eligible issuesSBC Communications, AT\&T, Eastman Kodak, and J.P. Morgan Chase-account for roughly 86 percent of the total portfolio value). Any remaining cash will be held in a money-market fund pending subsequent purchases, which will be made whenever the client's holdings of each month's eligible stocks are below the percentages indicated by the strategy by an amount sufficient to warrant a trade.

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

THE DOW JONES INDUSTRIALS RANKED BY YIELD

|  | Ticker Symbol | _- Market Prices |  |  | - 12-Month - |  | Latest Dividend _ |  |  | - Indicated - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Record |  | Annual | Yield + |
|  |  | 9/15/03 | 8/15/03 | 9/13/02 |  |  | High | Low | Amount | Date | Paid | Dividend | (\%) |
| Altria Group | MO | \$40.60 | 39.85 | 46.30 | 48.18 | 27.70 | 0.680 | 9/15/03 | 10/09/03 | 2.720 | 6.70 |
| $\star$ Eastman Kodak | EK | \$27.85 | 27.13 | 28.36 | 41.08 | 24.18 | 0.900 | 6/02/03 | 7/16/03 | 1.800 | 6.46 |
| $\star$ SBC Comm. | SBC | \$23.06 | 23.23 | 24.55 | 31.65 | 18.85 | 0.283 | 7/10/03 | 8/01/03 | 1.130 | 4.90 |
| General Motors | GM | \$41.25 | 37.10 | 44.08 | 45.18 | 29.75 | 0.500 | 8/15/03 | 9/10/03 | 2.000 | 4.85 |
| $\star$ AT\&T (r) | T | \$22.26 | 21.03 | 12.72 | 29.52 | 13.45 | 0.238 | 9/30/03 | 11/03/03 | 0.950 | 4.27 |
| $\star$ J. P. Morgan Chase | JPM | \$33.97 | 33.66 | 22.04 | 38.26 | 15.26 | 0.340 | 7/03/03 | 7/31/03 | 1.360 | 4.00 |
| * DuPont | DD | \$44.07 | 43.63 | 40.08 | 45.55 H | 34.71 | 0.350 | 8/15/03 | 9/12/03 | 1.400 | 3.18 |
| Citigroup | C | \$44.16 | 44.90 | 29.38 | 48.15 | 24.42 | 0.350 | 8/04/03 | 8/22/03 | 1.400 | 3.17 |
| Merck | MRK | \$53.09 | 53.48 | 49.27 | 63.50 | 43.35 | 0.370 | 8/12/03 | 8/19/03 | 1.480 | 2.79 |
| Exxon Mobil | XOM | \$37.51 | 36.83 | 34.08 | 38.50 H | 31.18 | 0.250 | 8/13/03 | 9/10/03 | 1.000 | 2.67 |
| Honeywell Intl. | HON | \$28.26 | 28.55 | 23.56 | 30.07 | 18.77 | 0.188 | 8/20/03 | 9/10/03 | 0.750 | 2.65 |
| International Paper | IP | \$39.82 | 40.70 | 37.04 | 41.50 H | 31.35 | 0.250 | 8/21/03 | 9/15/03 | 1.000 | 2.51 |
| General Electric | GE | \$31.40 | 28.78 | 27.05 | 31.75 | 21.30 | 0.190 | 9/29/03 | 10/27/03 | 0.760 | 2.42 |
| Alcoa | AA | \$28.54 | 27.70 | 21.99 | 29.50 H | 17.62 | 0.150 | 11/07/03 | 11/25/03 | 0.600 | 2.10 |
| * Caterpillar | CAT | \$69.00 | 70.96 | 40.64 | 73.97 H | 33.75 | 0.350 | 7/21/03 | 8/20/03 | 1.400 | 2.03 |
| Coca-Cola | KO | \$43.50 | 45.01 | 49.65 | 53.10 | 37.01 | 0.220 | 9/15/03 | 10/01/03 | 0.880 | 2.02 |
| Procter \& Gamble | PG | \$91.74 | 89.12 | 92.00 | 93.50 | 79.57 | 0.455 | 7/18/03 | 8/15/03 | 1.820 | 1.98 |
| Boeing | BA | \$35.50 | 32.94 | 35.58 | 38.90 H | 24.73 | 0.170 | 8/15/03 | 9/05/03 | 0.680 | 1.92 |
| 3M Company | MMM | \$138.43 | 142.66 | 119.83 | 145.70 H | 108.45 | 0.660 | 9/22/03 | 9/29/03 | 2.640 | 1.91 |
| Johnson \& Johnson | JNJ | \$50.84 | 51.05 | 54.14 | 61.30 | 49.00 L | 0.240 | 8/19/03 | 9/09/03 | 0.960 | 1.89 |
| United Tech. | UTX | \$78.20 | 76.48 | 58.00 | 80.75 H | 48.83 | 0.350 | 11/14/03 | 12/10/03 | 1.400 | 1.79 |
| Hewlett-Packard | HPQ | \$19.83 | 21.40 | 13.50 | 23.90 H | 10.92 | 0.080 | 9/17/03 | 10/08/03 | 0.320 | 1.61 |
| Walt Disney | DIS | \$20.10 | 22.45 | 15.50 | 23.80 | 13.90 | 0.210 | 12/13/02 | 1/09/03 | 0.210 | 1.04 |
| McDonald's | MCD | \$23.49 | 22.98 | 20.53 | 24.25 | 12.12 | 0.235 | 11/15/02 | 12/02/02 | 0.235 | 1.00 |
| American Express | AXP | \$44.64 | 45.50 | 34.19 | 46.40 H | 26.55 | 0.100 | 7/03/03 | 8/08/03 | 0.400 | 0.90 |
| Home Depot, Inc. | HD | \$32.78 | 33.54 | 33.45 | 34.99 H | 20.10 | 0.070 | 9/04/03 | 9/18/03 | 0.280 | 0.85 |
| IBM | IBM | \$88.49 | 81.79 | 72.50 | 90.40 | 54.01 | 0.160 | 8/08/03 | 9/10/03 | 0.640 | 0.72 |
| Wal-Mart Stores | WMT | \$57.75 | 58.10 | 54.40 | 60.20 H | 46.25 | 0.090 | 6/20/03 | 7/07/03 | 0.360 | 0.62 |
| Microsoft Corp. (s) | MSFT | \$28.36 | 25.54 | 23.96 | 29.48 | 21.56 | 0.160 | 10/17/03 | 11/07/03 | 0.160 | 0.56 |
| Intel Corp. | INTC | \$27.99 | 25.05 | 16.03 | 29.20 H | 12.95 | 0.020 | 11/02/03 | 12/01/03 | 0.080 | 0.29 |

$\star$ Bur. $\underset{\leftarrow}{ }$ Hold. $\dagger$ Based on indicated dividends and market price as of $9 / 15 / 03$. H New 52-week high. L New 52-week low. (s) All data adjusted for splits. (r) All data adjusted for reverse splits. * SBC paid an extra dividend of .05 on 5/1/03 that is not included in the annual yield.
Note: The issues indicated for purchase $(\star)$ are the 4 highest-yielding issues (other than Altria Group and General Motors) qualifying for purchase in the top 4 -for- 18 months model portfolio. The issues indicated for retention ( $k$ ) have similarly qualified for purchase during one or more of the preceding 17 months, but do not qualify for purchase this month.

# RECENT MARKET STATISTICS 

| Precious Metals \& Commodity Prices |  |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{9 / 1 5 / 0 3}$ | Mo. Earlier | Yr. Earlier |
|  | $\mathbf{3 7 3 . 5 0}$ | 364.50 | 318.80 |
| Gold, London p.m. fixing | $\mathbf{5 . 1 6}$ | 5.02 | 4.60 |
| Silver, London Spot Price | $\mathbf{0 . 8 2}$ | 0.79 | 0.69 |
| Copper, COMEX Spot Price | $\mathbf{2 8 . 1 4}$ | 31.05 | 29.81 |
| Crude Oil, W. Texas Int. Spot | $\mathbf{1 5 0 . 7 3}$ | 149.41 | 138.20 |
| Dow Jones Spot Index | $\mathbf{1 1 9 . 2 1}$ | 117.96 | 106.39 |
| Dow Jones-AIG Futures Index | $\mathbf{2 4 0 . 4 2}$ | 235.67 | 227.08 |
| CRB-Bridge Futures Index |  |  |  |


| Interest Rates (\%) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| U.S. Treasury bills - | 91 day | 0.93 | 0.95 | 1.67 |
|  | 182 day | 1.00 | 1.03 | 1.67 |
|  | 52 week | 1.10 | NA | 1.70 |
| U.S. Treasury bonds - | 15 year | 4.90 | 5.19 | 4.60 |
| Corporates: |  |  |  |  |
| High Quality - | 10+ year | 5.87 | 6.18 | 6.06 |
| Medium Quality - | 10+ year | 6.42 | 6.80 | 7.09 |
| Federal Reserve Discount Rate |  | 2.00 | 2.00 | 1.25 |
| New York Prime Rate |  | 4.00 | 4.00 | 4.75 |
| Euro Rates | 3 month | 2.16 | 2.14 | 3.32 |
| Government bonds - | 10 year | 4.32 | 4.13 | 4.47 |
| Swiss Rates - | 3 month | 0.27 | 0.25 | 0.75 |
| Government bonds - | 10 year | 2.88 | 2.58 | 2.75 |

British Pound
Canadian Dollar
Euro
Japanese Yen
South African Rand
Swiss Franc

Exchange Rates

| $\mathbf{\$ 1 . 5 9 3 9 0 0}$ | 1.591000 | 1.543300 |
| :--- | :--- | :--- |
| $\mathbf{\$ 0 . 7 3 1 9 0 0}$ | 0.719700 | 0.632600 |
| $\mathbf{\$ 1 . 1 2 3 4 0 0}$ | 1.118900 | 0.970000 |
| $\mathbf{\$ 0 . 0 0 8 5 9 7}$ | 0.008370 | 0.008189 |
| $\mathbf{\$ 0 . 1 3 2 9 0 0}$ | 0.136800 | 0.093300 |
| $\mathbf{\$ 0 . 7 2 1 3 0 0}$ | 0.724300 | 0.660100 |


|  | $\mathbf{9 / 1 5 / 0 3}$ | Mo. Earlier | Yr. Earlier |
| :--- | ---: | ---: | ---: |
| S \& P 500 Stock Composite | $\mathbf{1 , 0 1 4 . 8 1}$ | 990.67 | 889.81 |
| Dow Jones Industrial Average | $\mathbf{9 , 4 4 8 . 8 1}$ | $9,321.69$ | $8,312.69$ |
| Dow Jones Transportation Average | $\mathbf{2 , 7 3 2 . 9 8}$ | $2,623.66$ | $2,246.87$ |
| Dow Jones Utilities Average | $\mathbf{2 4 4 . 2 1}$ | 237.47 | 225.63 |
| Dow Jones Bond Average | $\mathbf{1 7 0 . 1 6}$ | 165.63 | 148.98 |
| Nasdaq Composite | $\mathbf{1 , 8 4 5 . 7 0}$ | $1,702.01$ | $1,291.40$ |
| Financial Times Gold Mines Index | $\mathbf{1 , 5 3 2 . 1 1}$ | $1,454.63$ | $1,265.52$ |
| FT African Gold Mines | $\mathbf{2 , 4 7 1 . 1 1}$ | $2,326.98$ | $2,207.69$ |
| FT Australasian Gold Mines | $\mathbf{2 , 7 6 5 . 4 1}$ | $2,367.53$ | $1,632.57$ |
| FT North American Gold Mines | $\mathbf{1 , 2 1 0 . 5 3}$ | $1,161.25$ | 992.38 |


| Coin Prices |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 9/15/03 | Mo. Earlier | Yr. Earlier | Premium |
| American Eagle (1.00) | \$384.35 | 370.75 | 329.55 | 2.90 |
| Austrian 100-Corona (0.9803) | \$366.13 | 353.13 | 313.93 | 0.00 |
| British Sovereign (0.2354) | \$91.95 | 88.75 | 79.25 | 4.58 |
| Canadian Maple Leaf (1.00) | \$384.60 | 371.00 | 329.80 | 2.97 |
| Mexican 50-Peso (1.2057) | \$451.70 | 435.70 | 387.50 | 0.30 |
| Mexican Ounce (1.00) | \$374.50 | 361.20 | 321.20 | 0.27 |
| S. African Krugerrand (1.00) | \$380.35 | 366.95 | 326.55 | 1.83 |
| U.S. Double Eagle-\$20 (0.9675) |  |  |  |  |
| St. Gaudens (MS-60) | \$430.00 | 415.00 | 385.00 | 18.99 |
| Liberty (Type I-AU) | \$675.00 | 675.00 | 675.00 | 86.79 |
| Liberty (Type II-AU) | \$440.00 | 440.00 | 385.00 | 21.76 |
| Liberty (Type III-AU) | \$415.00 | 405.00 | 359.50 | 14.84 |
| U.S. Silver Coins (\$1,000 face value) |  |  |  |  |
| 90\% Silver (715 oz.) | \$4,450.00 | 4,450.00 | 4,600.00 | 20.62 |
| 40\% Silver (292 oz.) | \$1,587.50 | 1,587.50 | 1,575.00 | 5.36 |
| Silver Dollars | \$6,300.00 | 6,300.00 | 6,025.00 | 57.82 |

Securities Markets

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $\$ 373.50$ per ounce and silver at $\$ 5.16$ per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

| Short-Term Bond Funds | Ticker Symbol | 9/15/03 | Month Earlier | Year Earlier | - 52-Week - |  | Distributions Latest 12 Months |  | Yield(\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low | Income | Capital Gains |  |
| * iShares Lehman 1-3 Yr Treasury | SHY | \$82.47 | 82.08 | 81.58 | 83.04 | 81.37 | 1.3989 | 0.0000 | 1.70 |
| $\star$ USAA Short Term Bond | USSBX | \$9.09 | 9.04 | 9.12 | 9.23 | 8.89 | 0.3902 | 0.0000 | 4.29 |
| $\star$ Vanguard Short-term Corporate | VFSTX | \$10.80 | 10.75 | 10.74 | 10.96 | 10.58 | 0.4804 | 0.0000 | 4.45 |
| Income Equity Funds |  |  |  |  |  |  |  |  |  |
| $\star$ DNP Select Income ${ }^{1,2}$ | DNP | \$10.86 | 10.50 | 10.16 | 11.20 | 8.19 | 0.7800 | 0.0000 | 7.18 |
| * Vanguard REIT Index | VGSIX | \$14.08 | 13.63 | 12.67 | 14.23 | 10.94 | 0.7700 | 0.0000 | 5.47 |
| Large Cap. Value Equity Funds |  |  |  |  |  |  |  |  |  |
| * iShares S\&P 500 Value Index ${ }^{3}$ | IVE | \$49.53 | 49.09 | 43.02 | 52.32 | 35.91 | 0.8565 | 0.1472 | 1.73 |
| $\star$ Vanguard Value Index | VIVAX | \$17.03 | 16.78 | 14.73 | 17.30 | 12.38 | 0.3050 | 0.0000 | 1.79 |
| Small Cap. Value Equity Funds |  |  |  |  |  |  |  |  |  |
| $\star$ iShares Sm. Cap. 600 Value Index ${ }^{3}$ | IJS | \$90.16 | 86.20 | 74.85 | 92.36 | 62.50 | 0.7530 | 0.3430 | 0.84 |
| $\star$ Vanguard Sm. Cap Value Index | VISVX | \$10.25 | 9.72 | 8.84 | 10.41 | 7.39 | 0.0900 | 0.0000 | 0.88 |
| Growth Equity Funds |  |  |  |  |  |  |  |  |  |
| * iShares S\&P 500 Growth Index ${ }^{3}$ | IVW | \$52.09 | 50.14 | 45.98 | 52.69 | 40.70 | 0.5551 | 0.1124 | 1.07 |
| $\star$ Vanguard Growth Index | VIGRX | \$23.21 | 22.39 | 20.46 | 23.64 | 18.29 | 0.2370 | 0.0000 | 1.02 |
| Foreign Equity Funds |  |  |  |  |  |  |  |  |  |
| * iShares S\&P Europe 350 Index ${ }^{3}$ | IEV | \$55.45 | 54.55 | 47.30 | 55.94 | 39.52 | 1.9044 | 0.0000 | 3.43 |
| T Rowe Price European Stock | PRESX | \$14.97 | 14.67 | 12.73 | 15.08 | 10.81 | 0.1400 | 0.0000 | 0.94 |
| $\star$ Vanguard European Stock Index | VEURX | \$18.99 | 18.62 | 16.36 | 19.10 | 13.64 | 0.4000 | 0.0000 | 2.11 |


|  | Ticker Symbol |  | Month Earlier | Year Earlier | - 52-Week - |  | Distributions |  | Yield (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 9/15/03 |  |  | High | Low | Latest 12 Months | Frequency |  |
| Anglo American PLC, ADR | AAUK | \$18.97 | 18.34 | 12.70 | 19.40 | 11.39 | 0.480 | Semiannual | 2.53 |
| $\star$ Anglogold Ltd., ADR | AU | \$38.59 | 37.30 | 27.90 | 40.90 | 22.50 | 1.329 | Semiannual | 3.44 |
| ASA Ltd. ${ }^{1}$ | ASA | \$43.30 | 41.73 | 33.90 | 45.40 | 27.50 | 0.600 | Quarterly | 1.39 |
| $\star$ Barrick Gold Corp. $\dagger$ | ABX | \$19.64 | 18.30 | 17.55 | 21.14 | 13.82 | 0.220 | Semiannual | 1.12 |
| $\star$ Gold Fields Ltd. | GFI | \$14.03 | 13.01 | 13.98 | 15.44 | 9.52 | 0.318 | Semiannual | 2.27 |
| $\star$ Newmont Mining | NEM | \$38.59 | 38.50 | 29.34 | 40.90 | 22.57 | 0.160 | Quarterly | 0.41 |
| $\star$ Placer Domet | PDG | \$13.82 | 13.16 | 10.73 | 14.45 | 7.97 | 0.100 | Semiannual | 0.72 |
| $\star$ Rio Tinto PLC $\ddagger$ | RTP | \$90.95 | 84.56 | 69.65 | 91.10 | 62.03 | 2.420 | Semiannual | 2.66 |

$\star$ Buy. $\AA$ Hold. (s) All data adjusted for splits. $\dagger$ Dividend shown is after $15 \%$ Canadian tax withholding. $\ddagger$ Dividend shown is after $15 \%$ U.K. tax withholding on a portion of the total. na Not applicable. ${ }^{1}$ Closed-end fund, traded on the NYSE. ${ }^{2}$ Dividends paid monthly. ${ }^{3}$ Exchange traded fund, traded on ASE.

The information herein is derived from generally reliable sources, but cannot be guaranteed. American Investment Services, the American Institute for Economic Research, and the officers, employees, or other persons affiliated with either organization may from time to time have positions in the investments referred to herein.


[^0]:    * The strategy excludes Altria and General Motors. ** Currently indicated purchases approximately equal to indicated purchases 18 months ago. ${ }^{1}$ 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. ${ }^{2}$ 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 15year total returns are annualized as are the total returns and the standard deviations of those returns since December 1963.
    Note: These calculations are based on hypothetical trades following a very exacting stockselection strategy, and are gross of any management fees. They do not reflect returns on actual investments or previous recommendations of AIS. Past performance may differ from future results.

