# American Investment Services, Inc. 

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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.

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Great Barrington, Massachusetts 01230
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$\mathbf{W i t h}_{\text {ith }}$ this issue of Investment Guide we are making several changes in the way we present our approach to investing in general and our investment recommendations in particular.

We have recommended several mutual funds for the first time and have greatly streamlined and simplified the table that sets forth our recommended percentage portfolio allocations for various types of assets. Instead of recommending ranges of percentages according to the age and responsibilities of the investor and the size of the investor's holdings, we now show allocations for just conservative, moderate, and aggressive portfolios.

Our current allocations remain defensive and 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. We have made these recommendations in the light of AIER's appraisal of business-cycle conditions as well as our own appraisal of current market conditions. The recommended allocations may change from time to time as conditions warrant. The portion of the three approaches held in fixed-dollar claims currently ranges from $25 \%$ (aggressive) to $65 \%$ (conservative) with the remainder in equities (common stocks and mutual funds). You should use these guidelines for developing your own personal portfolio allocation percentages according to your individual circumstances and tolerance for risk. The extreme values shown in the table are just that-values somewhere in the middle will be appropriate for most investors. Readers should give considerable thought to developing percentage asset allocations that are best
suited to their own situation and requirements.

## Liquidity

Investors should first consider what funds may be needed for immediate noninvestment purposes. To be sure, many financial assets can be converted to cash almost immediately, in contrast to real estate or collectibles. But not all types of financial assets can be liquidated at favorable prices when you may need to sell. Even cashing in a bank certificate of deposit before it matures can result in a loss of interest income. No matter how liquid, no guarantee exists that assets such as actively traded securities can be sold at a profit. Thus, if you expect to buy a house or a car, to send someone to college in the next few years, or even to make withdrawals from an IRA, the funds should be held in a stable and easily accessible form.

A completely risk-intolerant individual, i.e., one who simply cannot bear the thought that what he has purchased might become worth less than he paid for it, would be limited to holdings such as Treasury bills, money market funds, and similar short-term fixed-dollar claims. Such an investor would forego other types of financial assets, even those that have historically provided higher-in some instances much higher-long-term returns. Investing means accepting some degree of risk.

## How Much Risk?

Risk is usually quantified by measuring the variation in the rate of total return. The total return on a security is the combination of income in the form of interest or dividends plus or minus the change in its price from period to period.

## RECOMMENDED PORTFOLIO ALLOCATION PERCENTAGES

|  | Conservative | Moderate | Aggressive |
| :--- | :---: | :---: | :---: |
| Money Market Funds | 30 | 20 | 10 |
| Intermediate Bonds | 35 | 25 | 15 |
| Income Equities | 10 | 5 | 0 |
| Large Cap Value Stocks | 20 | 30 | 35 |
| Small Cap Value Stocks | 0 | 5 | 10 |
| Growth Stocks | 5 | 5 | 10 |
| Foreign Equities | 0 | 5 | 10 |
| Gold Related | $\mathbf{0}$ | $\underline{5}$ | $\underline{10}$ |

Note: Most investors should adopt values in between the extreme conservative and aggressive percentages shown above. What is best for an individual investor will depend on individual circumstances, and one's tolerance for risk.

Theoretically, this is not entirely satisfactory. For example, a hypothetical asset that steadily decreased in price, say at a rate of two percent per year, would have no variation in its rate of total return and might be said to carry no risk. In the world of investments, higher total returns on a given asset are generally accompanied by greater variability.

This means that, while an asset may have an expected rate of return based on its historical record, near-term results are not at all predictable, and the higher the expected rate of return, the less predictable the short-term results will be. On the other hand, the variability of returns on assets of a given type is fairly stable, i.e., the past variability of returns for an asset class is a good indication of how variable its future returns will be. Assets with differing investment characteristics seldom move in lock step with each other. Diversification thus provides a second means of reducing risk (the first being to hold assets with a low volatility of returns).

Before we attempt to describe how an investor might go about developing his or her own preferred portfolio, we first describe the components.

## Money Market Funds

Money market funds are mutual funds that invest in short-term securities such as Treasury bills, bankers' acceptances, commercial paper, or negotiable certificates of deposit of major commercial banks. The shares of money market funds are issued and redeemed at a Net Asset Value (NAV) of $\$ 1.00$ per share. They should not be confused with money market deposit accounts offered by banks, which are essentially interest bearing checking accounts, insured by the Federal Deposit Insurance Corporation (FDIC) and subject to minimum balance requirements and limited check writing privileges (typically no more than 3 per month).

The FDIC does not insure money market mutual funds. The Securities Investor Protection Corporation (SIPC) covers funds held in a brokerage account, however. Moreover, in the few instances to date where there have been defaults on securities in a money market, the fund's managers have made good the amount needed to keep their fund's NAV at $\$ 1.00$ per share, even though they were under no legal obligation to do so.

Most brokers offer their customers a money market fund for a "sweep" ac-
count. Dividends, interest, and deposits are used to purchase additional shares in this fund, which may be redeemed to pay for purchases and withdrawals from the account. Similarly, mutual funds in "families"-which have the same sponsors and management companies, such as Vanguard-will include several money market funds among their offerings and will permit (with some restrictions) switching between equity mutual funds and the money market funds in the same "family."

Like so much else in investing, the selection of a money market fund from the choices available to you involves a tradeoff between yield and risk. However, the difference is not large. The safest money market funds hold only U.S. Treasuries, while higher-yielding issues hold mainly obligations of businesses and banks. The difference in yield is seldom more that 100 basis points ( 1 percentage point) and much less than that in most instances. For example, the difference between the yield on Charles Schwab's Treasury Money Market Fund ( $5.36 \%$ ) and its "generic" Schwab Money Market Fund (5.69\%) recently was just 33 basis points.

## Intermediate Term Bonds

The purpose of this component is to enhance and stabilize income. In large portfolios some bonds may be purchased directly (buy Treasuries or issues rated Aa or better), as discussed in last September's

## Investment Guide.

Short-term bonds should serve not only to stabilize the income from the fixed-dollar portion of one's portfolio, but also to increase it. By limiting the maturities to the short end of what is available, the risk of lower prices if rates increase is limited. During the past 10 years 91-day Treasury bills outperformed the Lehman Brothers 1-5 Year Investment Grade Debt Index during only 21 out of 120 rolling 12 -month periods, and there were no 24-month periods when the Tbills did better.

Buying short-term bonds directly means the future stream of income and principal payments can be exactly ascertained, which could be especially useful when one expects that the funds will be needed (e.g. for tuition payments) during the next few years.

Individuals wishing to purchase bonds directly should work closely with their brokers, pay close attention to the bond ratings of what the broker has to offer, and fully understand the amount of the
broker's commission.
However, many investors may find it more convenient to invest in short-to-intermediate-term bonds via mutual funds, which offer advantages over direct purchases. Most importantly, they may be purchased and sold at any time and in relatively convenient amounts (although most funds do have a minimum purchase, these are usually far lower than what is needed for a cost-effective bond trade). Second, because they have a large portfolio of bonds, they can include some of the lowest investment grade issues (Baa or BBB) that we do not recommend for direct purchase by individuals who may only hold a handful of issues. The higher yields available on such issues may even offset the fees and expenses of the fund.

Among the many bond funds available we recommend three that have low expense ratios, low turnover, and good ratings. These are indicated with a $\star$ on the back page. [Note: for our investment management clients, in addition to purchasing bonds directly, we will be using the DFA Five Year Global Fixed Income Fund, which invests in fixed-income securities of industrialized countries of less than five-year maturity. Its foreign currency holdings are hedged to the dollar. DFA funds are available only to institutions and the clients of registered investment advisors.]

## Income Equities

We currently have only two recommendations in this category.

The first is Duff \& Phelps Utilities Income Inc., a closed-end diversified investment company traded on the New York Stocks exchange (symbol DNP). The primary investment objective of the Fund is current income and long-term growth of income. Dividends are paid monthly and its current yield is about $7.5 \%$. The company invests mainly in the securities of public utilities and its returns benefit from modest leverage (unique as far as we are aware) via issuance of short-duration preferred shares that are sold to corporate treasurers at favorable rates.

The second is the Vanguard REIT Index Fund (symbol VGSIX) that invests in the equity Real Estate Investment Trusts that comprise the Morgan Stanley REIT index. Its current yield is about $7 \%$.

Although these are equity investments that have some prospects for capital gains, their main attraction is generous income, which may be needed for spendable in-
come or may be compounded in tax-favored situations.

## Large Capitalization Value Stocks

After a disquieting year, our Top 4-for-18-Months High-Yield Dow stock selection strategy model portfolio has again outperformed the Dow Jones Industrial Average (DJIA) over the most recent 12month span, as well as over the longer periods reported in the box on p . 6. (The box also provides a description of the strategy's construction and current composition.) This may or may not continue for the rest of 2001 and later years. However, all our studies indicate that it will do well over the long term. Indeed, from 1963 to the present (the period for which we have data), its long-term record has the best combination of risk (volatility) and return of the various asset classes and indexes we have surveyed. That is why this component is our largest recommended commitment to equities.

Where the size of the account permits, we recommend using our Top 4-for-18months High-Yield Dow stock selection strategy. Smaller accounts may substitute the iShares S\&P 500 BARRA Value Index Fund (IVE) or the Vanguard S\&P 500 BARRA Value Index. Fund (VIVAX). Both of these are based on the same index, which is composed of the companies with the lowest price-to-book value ratios that are included in the S\&P 500 index. The 370 or so companies in that index account for half of the market capitalization of the entire S\&P 500.

## Small Capitalization Value Stocks

As we discussed in the October Investment Guide, small capitalization stock prices often fluctuate differently from large capitalization stock prices. For this component we recommend two vehicles, both based on the S\&P 600 BARRA Small Cap index, which consist of 600 domestic stocks chosen for market size, liquidity (bid-asked spread, ownership, share turnover and number of no trade days), and industry group representation. It is a market value weighted index (stock price times the number of shares outstanding), with each stock's weight in the index proportionate to its market value.

The funds we recommend here hold the issues in the index with the lowest price-to-book value ratios whose aggregate market capitalization equals half of the entire index. They are the exchangetraded iShares S\&P 600 BARRA Small Cap Value Index Fund (Symbol IJS) and the

Vanguard S\&P 600 BARRA Small Cap Value Index Fund (VSIIX). [Note: these funds hold companies with market capitalizations that are somewhat larger than the companies held by the DFA funds that we use for our Investment Management Clients, but we believe IJS and VSIIX can also provide useful diversification in our readers' portfolios.]

## Growth Stocks

Although growth stocks had some very good years during the 1990s, over the long term they have lagged behind value stocks. But growth stocks have outperformed fixed-income investments by a wide margin over the long term. As with small-capitalization value stocks, the large-capitalization growth stocks tend not to move in tandem with large capitalization value stocks, which is why they belong in even the most conservative portfolios.

For this component we also recommend two vehicles, both based on the S\&P 500 BARRA Growth index. This index is composed of the companies with the highest price-to-book ratios that are included in the S\&P 500 index. The 130 or so companies in that index account for half of the market capitalization of the entire S\&P 500 and include all the bright lights of recent history (Microsoft, GE, Cisco, Intel, etc.). This index has consistently outperformed most self-proclaimed growth-stock funds under active management.

Our recommendations include the exchange-traded iShares S\&P 500 BARRA Growth Index Fund (IVW) and the Vanguard S\&P 500 BARRA Growth Index Fund (VIGRX). Readers might well ask if they should instead purchase the index fund for the entire S\&P 500, especially if the value index fund (the other half of the S\&P 500) is used for the large capitalization value component. The answer is no, not only because we are recommending a larger commitment to the value stocks than to the growth stocks, but also because rebalancing one's holdings among the components (see below) is an important
aspect of our approach.

## Foreign Equities

At present we only recommend exposure to the equities of Western Europe. Again we have two recommendations: the exchange-traded iShares S\&P Europe 350 (IEV), which is based on the index of that name, and the Vanguard European Stock Index Fund (VEURX), which is based on the Morgan Stanley Capital International (MSCI) Europe Index. In addition to reflecting the fluctuations of European markets, which often diverge from U.S. the market, the dollar value of these funds will reflect the fluctuations of European currencies, notably the euro, against the dollar.

## Gold-Related Investments

We have long recommended direct ownership of gold coins for individuals. This is not so much to make money as to have money in all circumstances. Unlike other financial assets that depend on explicit or implicit contracts and can be voided "with the stroke of a pen," gold coins have no obligor. Readers should be aware that coin dealers' margins are very high on numismatic and newly minted fractional ounce coins. They should be avoided. Our recommended low-premium, common-date or restrike coins are listed on p. 8.

Investors can receive the benefits of indirect ownership of gold "in the ground" via shares of precious metals mining companies. Our recommended shares include only well-established, producing, divi-dend-paying companies (also listed on $p$. 8). For these companies, any increase in the price of gold flows almost entirely to the bottom line.

Although the price of gold has been languishing in a trading range of $\$ 250$ to $\$ 300$ per ounce for some time, readers should keep in mind that mine production has begun to decline even as fabrication demand has continued to increase. Central banks have been making up the shortfall and at the same time have been creating dollars and other paper currencies at a rate far in excess of
the growth of economic activity. These trends and general price stability cannot be sustained indefinitely. Gold ownership provides some insurance against the day when general price inflation accelerates once again.

## Your Own Investment Plan

No easy answers exist for how much risk an individual investor should accept. Much will depend on individual preferences and needs. Some general principles must be considered, nevertheless. All else being equal:

- Larger portfolios are in a position to undertake more risk than smaller holdings.
- Tax-favored accounts should be invested more conservatively than those subject to immediate taxation of income and capital gains.
- As investors grow older, their portfolios should become more conservative.
These principles are derived from the liquidity considerations noted above (how much can you afford to lose?) and from the U.S. income tax code. Given that the equity investment vehicles we recommend are diversified and largely based on indexes, the maximum expected loss will be only a fraction of the portion invested. In other words, the amount of maximum tolerable potential losses is not the entire investment in equities but only a much lower proportion.

Obviously, those with ample resources can better withstand setbacks than those with limited funds. The tax code plays an important role here, given that those with large portfolios also tend to have aboveaverage incomes subject to the very highest tax rates. For such persons, capital gains, which comprise the major portion of the total returns on most equities, are taxed lightly relative to interest and dividend income. This makes equity holdings more attractive relative to fixed-dollar claims.

By the same token, all forms of income in self-managed retirement accounts accumulate free of taxes, and all withdrawals are deemed to be ordinary income

NEWLY RECOMMENDED FUNDS

|  | Ticker Symbol | 1/12/01 | Month Earlier | Year Earlier | - 52-Week - |  | Distributions Latest 12 Months |  | Yield (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | High | Low | Income | Capital Gains |  |
| iShares Index Funds: |  |  |  |  |  |  |  |  |  |
| S\&P SmallCap 600/BARRA Value | IJS | 79.19 | 69.98 | na | 81.81 | 66.63 | 0.0935 | 1.1231 | 0.47 |
| S\&P 500/BARRA Value | IVE | 64.27 | 60.88 | na | 66.00 | 58.25 | 0.1837 | 0.1472 | 1.14 |
| S\&P 500/BARRA Growth | IVW | 67.69 | 71.25 | na | 94.25 | 69.88 | 0.0668 | 0.1124 | 0.39 |
| S\&P Europe 350 | IEV | 76.55 | 73.94 | na | 80.75 | 69.75 | 0.0092 | 0.0000 | 0.05 |
| Vanguard Value Index | VIVAX | 23.14 | 22.55 | 23.11 | 23.67 | 20.05 | 0.0980 | 0.5700 | 1.69 |
| Vanguard Sm. Cap. Value Index | VSIIX | 9.95 | 9.19 | na | 9.95 | 8.40 | 0.0950 | 0.2500 | 0.95 |
|  |  |  |  | 4 |  |  |  | Janu | 2001 |

without distinction between ordinary income and capital gains. This means such accounts should overweight income-producing investments, so that the income can compound on a tax-deferred basis.

Many investors who have used such accounts to take "flyers" on speculative stocks come to bemoan the fact that they cannot deduct their losses on their income tax returns. What they conveniently forget is that they have received their deduction up front if what was put in the account was not taxed at the time it was contributed. But this is not so for Roth IRAs, where the contributions have been made with after-tax dollars and any eventual withdrawals are untaxed. Incomecompounding investments are especially appropriate in Roth IRAs where losses are simply deadweight.

This is not to say that equities do not belong in tax-favored accounts. Investors with relatively long time horizons should also commit a substantial portion of their tax-favored holdings to our recommended equity categories because they have provided superior long-term returns over the years. Also, the fiduciaries of trusts and endowments who must pay out all the ordinary income that they receive to beneficiaries would be remiss if they did not hold some equities to permit the principal to grow to offset general price inflation.

## How to Begin

You should start by making a list and valuation of all your current holdings of financial assets. You should then select a target percentage for each of the component categories described above. These should be based on the total value of your holdings, with the possible exception of any positions in stocks for which you have a very low cost basis and which you have no inclination or intention of selling. To repeat, the percentages shown in the table for conservative and aggressive portfolios are extreme values and in most instances the appropriate level will lie somewhere inbetween and closer to the moderate proportions listed in the table.

A complication may be that you hold assets in more than one kind of accountyour personal (and taxable) holdings plus one or more tax-advantaged accounts. You will have to apportion the overall allocations among these accounts. How this is done will depend greatly on the relative size of the accounts. The tax-advantaged accounts usually should be overweighted with the higher incomeproducing categories. Employer spon-
sored retirement accounts, $401(\mathrm{k})$ and similar accounts, can present a problem when they offer only a limited range of investment vehicles that may or may not match our recommended categories. In most instances we would recommend the closest approximation of a large cap value fund. Once this task is accomplished and your targets are set, you will probably need to make some adjustments to your current holdings.

## Do I need a Broker?

The reader may have noticed that it would be possible to follow our investment program using only mutual funds that can be purchased directly rather than through a broker. An advantage of doing so would be that there would be virtually no transaction costs. None of the funds we have recommended have either back-end or front-end loads. (Some Vanguard funds do charge a $1 \%$ fee on redemptions within 12 months of purchase. This fee is designed to discourage in-and-out trading and it is paid to the fund, not to the managers.) For the same reason, Vanguard states that it does not allow switches among equity funds by telephone or on the internet; such orders must be sent by mail. It does not appear that this would apply to relatively small changes between an equity fund and a money market fund, but all mutual fund purchases and redemptions will be at a NAV determined after the order has been given. In today's fast moving and volatile markets, this could make a difference.

You will have to use a broker to use the Top 4-for-18-Months High-Yield Dow stock selection strategy for the large capitalization value stock component of your portfolio. Use a discount broker, not a fullservice broker. Not only will you save a lot on commissions with a discount broker, you will not be pestered and distracted by sales pitches for whatever the broker's firm is underwriting and selling. (Some full-service brokers will not even buy Vanguard and other no-load mutual funds for your account.) You also will need a broker to trade in iShares index funds, Duff and Phelps, or short- and in-termediate-term bonds.

## Vanguard Funds vs. iShares

In three instances we recommend both a Vanguard and an iShares fund based on exactly the same index. Is there a difference? Yes. The iShares are relatively new. Since their introduction last year, Vanguard has disputed the Barclays Global Investors' (the iShares sponsor) claim
that their expense ratios are lower than Vanguard's. Time will resolve this dispute, but any difference is likely to be very small, on the order of $0.1 \%$ per year. Other differences between the two are more significant.

Exchange-traded shares must be purchased and sold through a broker, which means paying a commission. But it also means that the iShares may be traded with limit orders so that the investor can determine exactly what he or she will pay or receive rather than accepting whatever the NAV of the fund happens to be after the order is received. With respect to NAV, because the iShares trade on the open market, no guarantee exists that the price will exactly match the value of the underlying securities. The prices are kept in line by arbitrageurs, trading in the iShares, the underlying securities, and possibly futures.

To date the experience has been that the iShares track very closely with their indexes, even on an intraday basis. It may well be possible that by placing limit orders to buy iShares slightly below (and sell orders slightly above) recent quotes, favorable executions could more than recover the broker's commission.

## Staying the Course

Now we come to what is perhaps the most important aspect of our approach: discipline. Once you have determined your preferred portfolio allocations, you should stick to them. This means rebalancing when market fluctuations have caused your percentage holdings to vary from your targets. This will go against the fundamental human urge to want to have more of whatever seems to be going up and less of what seems to be going down. However, it will accomplish to some extent every investor's ambition-to buy cheap and sell dear.

A given component of a portfolio will have exceeded its target if it has gone up more than the other components. Rebalancing means that some of that component will be sold at a gain. This will be so even if the component in question continues to outperform others. You will, to be sure, not have done as well as if you had waited to rebalance. But it is always possible in hindsight to see how your investment performance could have been better, if, for example, you had bought anything at its low and sold at its high for the year. That way lies madness. The reported highs and lows represent only two transactions out of many thousands each
year-and there was a seller at the low and a buyer at the top.

## Rebalancing

The procedure described above is designed to make market fluctuations work for you rather than against you. It is based on the fact that differences in the shortrun fluctuations in the returns on different types of securities can be larger than differences in their long-term rates of return. No hard and fast rules exist on how often you should review your holdings. However, rebalancing transactions
should be undertaken only when justified by the size of the purchase or sale needed to bring a component to its target level. You should probably set a dollar limit, depending on the size of your total holdings and/or on the basis of the commissions you will pay to make a rebalancing transaction. (Remember that switching from one equity fund to another within a brokerage account will generate two commissions or transaction fees.)

## Reinvesting Dividends

Unless you have a need to generate
cash in an account for withdrawals, you should specify that all mutual fund dividends, income, and capital gains be reinvested in the fund. This is because rebalancing calculations will depend on the total return from each fund, and dividends are a part of the total return. (If your cash needs are moderate, you might specify that only capital gains dividends be reinvested.) This does not apply to stocks in the Top 4-for-18-Months High-Yield Dow program, where dividends should be reinvested in the stocks eligible for purchase each month.

## THE 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 $\star$ or a $\star$ 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 circum-
stances, it seems 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 more Chevron, which is no longer in the Dow, and some Minnesota Mining and J.P. Morgan Chase to buy Caterpillar, Dupont, and International Paper. 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 duplicat-

As of January 12, 2001


* The strategy excludes Philip Morris and General Motors. ** Indicated purchases approximately offset by sales of shares purchased 18 months ago. $\ddagger$ 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. $\ddagger \neq$ 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.
ing 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.

## Up from Stock Picking

The changes we have incorporated in this Quarterly Review mean that the basis of our recommendations now are almost completely free from considerations of the fundamentals of individual companies.

This month we are discontinuing recommendations for the 10 highest yielding issues in the DJIA, although we are continuing to publish the complete Dow table. When we began in 1991 with the HYD strategy, we had not thoroughly scrutinized the mechanics of getting into or out of a high-yielding Dow stock. Getting in was easy enough, one simply bought nos. 1 through 10. But getting out was not so clear. Selling an issue as soon as it ranked no. 11 or higher was clearly not a good idea. Similarly, it often was not a good idea to buy an issue as soon as it came on to the top 10-maybe it had much farther to drop in price, perhaps even going to no. 1. As a result, we adopted a general rule:
a stock should be purchased only when it had been ranked among the top 10 for 12 consecutive months or appeared likely to do so. To keep 10 recommended positions (either buy $\star$ or hold $\star$ ), we recommend the sale of whatever recommended position had the lowest yield when a new issue was recommended for purchase.

A recognition that this was not an entirely satisfactory procedure with purchases driving sales and some ad hoc judgements involved was the origin of the research that led to the development of the Top 4 -for-18-Months model. The model is based on incremental purchases of stocks that qualify for purchase in each current month and their sales 18 months later. In this way positions in individual stocks are accumulated and later sold off gradually. It is a purely mechanical and passive process, similar in its composition to the way that our recommended index funds are put together.

In the table below we are now marking the four highest-yielding stocks that
are not Philip Morris or General Motors, as eligible for purchase ( $\star$ ) and giving a hold ( $(\underset{\sim}{*})$ to all the issues currently in the 4 -for-18 model. This leads to the anomalous situation of AT\&T and Sears being rated as holds, even though they were never recommended under the old approach described above (they were not on the top 10 long enough). On the other hand, Exxon and General Motors, which we had recommended under the old approach, are not included in the 4 -for- 18 model because they have not qualified for purchase during the past 18 months.

Readers who hold the positions we recommended under the old approach should gradually move to the the 4 -for18 model, concentrating especially on the four issues recommended for purchase each month.

To repeat, going forward, the "Dow Table" we present every month will represent the recommendation suggested by our 4 -for-18 investment model, and not the oftentimes subjective choices from the top 10.

|  | Ticker Symbol | $\overline{1 / 12 / 01}^{\wedge}$ | Market Prices |  | - 12-Month - |  | Latest Dividend -_ |  |  | - Indicated - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Record |  | Annual | Yieldt |
|  |  |  | 12/15/00 | 1/14/00 |  |  | High | Low | Amount | Date | Paid | Dividend | (\%) |
| Philip Morris | MO | \$42.25 | 40.06 | 24.25 | 46.50 H | 18.69 | 0.530 | 12/15/00 | 1/10/01 | 2.120 | 5.02 |
| $\star$ Eastman Kodak | EK | \$40.88 | 38.19 | 60.56 | 66.63 | 35.31 | 0.440 | 12/01/00 | 1/02/01 | 1.760 | 4.31 |
| $\ddagger$ General Motors | GM | \$52.88 | 53.81 | 82.25 | 94.63 | 48.44 | 0.500 | 11/16/00 | 12/09/00 | 2.000 | 3.78 |
| $\star$ DuPont | DD | \$43.19 | 43.75 | 67.39 | 69.69 | 38.19 | 0.350 | 2/15/01 | 3/14/01 | 1.400 | 3.24 |
| $\star$ Caterpillar | CAT | \$43.69 | 40.81 | 51.94 | 53.38 | 29.00 | 0.340 | 1/22/01 | 2/20/01 | 1.360 | 3.11 |
| $\star$ International Paper | IP | \$36.94 | 37.38 | 55.88 | 56.44 | 26.31 | 0.250 | 11/24/00 | 12/15/00 | 1.000 | 2.71 |
| t J. P. Morgan Chase | JPM | \$53.31 | 160.00 | 128.00 | 67.17 | 32.38 L | 0.320 | 1/05/01 | 1/31/01 | 1.280 | 2.40 |
| \# Exxon Mobil | XOM | \$82.81 | 84.13 | 83.75 | 95.44 | 69.88 | 0.440 | 11/13/00 | 12/11/00 | 1.760 | 2.13 |
| $\star$ Minn. Min. \& Mfg. | MMM | \$109.69 | 112.19 | 99.31 | 122.94 H | 78.19 | 0.580 | 11/24/00 | 12/12/00 | 2.320 | 2.12 |
| Procter \& Gamble | PG | \$70.31 | 71.38 | 117.00 | 118.00 | 52.75 | 0.350 | 1/19/01 | 2/15/01 | 1.400 | 1.99 |
| \& SBC Comm. | SBC | \$50.94 | 53.69 | 42.00 | 59.00 | 34.81 | 0.254 | 1/10/01 | 2/01/01 | 1.010 | 1.98 |
| Merck | MRK | \$81.44 | 90.38 | 74.13 | 96.69 | 52.00 | 0.340 | 12/08/00 | 1/02/01 | 1.360 | 1.67 |
| Honeywell Intl. | HON | \$46.50 | 47.88 | 59.88 | 60.50 | 32.13 | 0.188 | 11/20/00 | 12/08/00 | 0.750 | 1.61 |
| Alcoa (s) | AA | \$31.81 | 30.94 | 40.00 | 41.59 | 23.13 | 0.125 • | 11/03/00 | 11/25/00 | $0.500 \bullet$ | 1.57 |
| General Electric (s) | GE | \$45.69 | 49.81 | 50.33 | 60.50 | 41.65 | 0.160 | 12/29/00 | 1/25/01 | 0.640 | 1.40 |
| Johnson \& Johnson | JNJ | \$94.56 | 98.56 | 93.69 | 105.94 H | 66.13 | 0.320 | 2/20/01 | 3/13/01 | 1.280 | 1.35 |
| United Tech. | UTX | \$70.69 | 71.19 | 63.81 | 79.75 H | 46.50 | 0.225 | 11/17/00 | 12/10/00 | 0.900 | 1.27 |
| Coca-Cola | KO | \$56.63 | 53.50 | 61.06 | 66.88 | 42.88 | 0.170 | 12/01/00 | 12/15/00 | 0.680 | 1.20 |
| Boeing | BA | \$60.63 | 64.88 | 44.00 | 70.94 | 32.00 | 0.170 | 2/09/01 | 3/02/01 | 0.680 | 1.12 |
| Citigroup (s) | C | \$53.13 | 48.06 | 58.00 | 59.13 | 35.34 | 0.140 | 11/06/00 | 11/22/00 | 0.560 | 1.05 |
| Hewlett-Packard (s) | HWP | \$30.69 | 31.63 | 56.25 | 68.09 | 29.13 L | 0.080 | 3/21/01 | 4/11/01 | 0.320 | 1.04 |
| American Express (s) | AXP | \$47.94 | 54.63 | 53.17 | 63.00 | 39.83 | 0.080 | 1/05/01 | 2/09/01 | 0.320 | 0.67 |
| Walt Disney | DIS | \$31.56 | 29.38 | 33.56 | 43.88 | 26.00 L | 0.210 | 12/08/00 | 12/22/00 | 0.210 | 0.67 |
| McDonald's | MCD | \$33.63 | 31.50 | 42.61 | 43.63 | 26.38 | 0.215 | 11/15/00 | 12/01/00 | 0.220 | 0.65 |
| * AT\&T | T | \$24.44 | 21.00 | 54.69 | 61.00 | 16.50 L | 0.038 | 12/29/00 | 2/01/01 | 0.150 | 0.61 |
| IBM | IBM | \$93.81 | 87.81 | 119.63 | 134.94 | 80.06 L | 0.130 | 11/10/00 | 12/09/00 | 0.520 | 0.55 |
| Wal-Mart Stores | WMT | \$52.94 | 49.88 | 64.50 | 66.44 | 41.44 | 0.060 | 12/22/00 | 1/08/01 | 0.240 | 0.45 |
| Home Depot, Inc. | HD | \$49.13 | 41.94 | 61.94 | 70.00 | 34.69 | 0.040 | 11/30/00 | 12/14/00 | 0.160 | 0.33 |
| Intel Corp. (s) | INTC | \$32.13 | 32.44 | 51.53 | 75.81 | 29.81 L | 0.020 | 2/07/01 | 3/01/01 | 0.080 | 0.25 |
| Microsoft Corp. | MSFT | \$53.50 | 49.19 | 112.25 | 116.06 | 40.25 L | 0.000 | - | - | 0.000 | 0.00 |
| * Chevron | CHV | \$80.94 | 78.25 | 87.00 | 94.88 | 69.94 | 0.650 | 11/17/00 | 12/11/00 | 2.600 | 3.21 |
| * Goodyear | GT | \$23.37 | 18.09 | 27.50 | 31.63 | 15.60 | 0.300 | 11/16/00 | 12/15/00 | 1.200 | 5.13 |
| *Sears, Roebuck | S | \$35.42 | 33.22 | 30.75 | 43.50 | 25.25 | 0.230 | 11/30/00 | 1/02/01 | 0.920 | 2.60 |

$\star$ Buy. \& Hold. † Based on indicated dividends and market price as of 1/12/01. H New 52-week high. L New 52-week low. (s) All data adjusted for splits. - Excludes extras. $\ddagger$ These issues had been recommended for purchase under our original HYD stock selection strategy, because they had ranked among the 10 highest yielding issues for more then 12 months. They should be retained by readers who currently hold them.
Note: The issues indicated for purchase $(\star)$ are the 4 highest yielding issues (other than Philip Morris and General Motors) qualifying for purchase in the top 4 for 18 months model portfolio. The issues indicated for retention ( $\sqrt{*}$ ) 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 |  |  |  |
| :--- | ---: | ---: | ---: |
|  | 1/12/01 | Mo. Earlier | Yr. Earlier |
|  | $\mathbf{2 6 3 . 7 0}$ | 270.35 | 283.30 |
| Gold, London p.m. fixing | $\mathbf{4 . 6 0}$ | 4.61 | 5.10 |
| Silver, London Spot Price | $\mathbf{0 . 8 4}$ | 0.87 | 0.85 |
| Copper, COMEX Spot Price | $\mathbf{3 0 . 0 5}$ | 28.87 | 28.03 |
| Crude Oil, W. Texas Int. Spot | $\mathbf{1 1 0 . 2 2}$ | 112.68 | 116.35 |
| Dow Jones Spot Index | $\mathbf{1 1 5 . 0 3}$ | 112.06 | 95.21 |
| Dow Jones-AIG Futures Index | $\mathbf{2 2 9 . 5 4}$ | 227.41 | 208.01 |
| CRB-Bridge Futures Index |  |  |  |


|  | Interest Rates (\%) |  |  |  |
| :--- | :---: | :---: | ---: | ---: |
| U.S. Treasury bills - | 91 day | $\mathbf{5 . 3 0}$ | 6.00 | 5.38 |
|  | 182 day | $\mathbf{5 . 2 1}$ | 5.97 | 5.65 |
|  | 52 week | $\mathbf{4 . 9 4}$ | 5.64 | 5.09 |
| U.S. Treasury bonds - | 15 year | $\mathbf{5 . 6 5}$ | 5.56 | 6.92 |
| Corporates: |  |  |  |  |
| High Quality - | 10+ year | $\mathbf{7 . 3 1}$ | 7.27 | 7.84 |
| Medium Quality - | 10+ year | $\mathbf{8 . 0 8}$ | 8.02 | 8.24 |
| Federal Reserve Discount Rate | $\mathbf{5 . 5 0}$ | 6.00 | 5.00 |  |
| New York Prime Rate |  | $\mathbf{9 . 0 0}$ | 9.50 | 8.50 |
| Euro Rates | 3 month | $\mathbf{4 . 7 8}$ | 4.95 | 3.34 |
| Government bonds - | 10 year | $\mathbf{4 . 7 2}$ | 4.86 | 5.42 |
| Swiss Rates - | 3 month | $\mathbf{3 . 4 0}$ | 3.50 | 1.73 |
| Government bonds - | 10 year | $\mathbf{3 . 3 9}$ | 3.69 | na |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | Exchange Rates |  |  |
| British Pound | $\mathbf{\$ 1 . 4 7 9 0 0 0}$ | 1.471000 | 1.634800 |  |
| Canadian Dollar | $\mathbf{\$ 0 . 6 6 7 7 0 0}$ | 0.655800 | 0.690000 |  |
| Euro | $\mathbf{\$ 0 . 9 4 1 4 0 0}$ | 0.894100 | 1.009200 |  |
| Japanese Yen | $\mathbf{\$ 0 . 0 0 8 4 5 4}$ | 0.008892 | 0.009485 |  |
| South African Rand | $\mathbf{\$ 0 . 1 2 7 7 0 0}$ | 0.130400 | 0.164300 |  |
| Swiss Franc | $\mathbf{\$ 0 . 6 1 7 8 0 0}$ | 0.594900 | 0.625700 |  |

Securities Markets

|  | 1/12/01 | Mo. Earlier | Yr. Earlier |
| :--- | ---: | ---: | ---: |
| S \& P 500 Stock Composite | $\mathbf{1 , 3 1 8 . 3 2}$ | $1,312.15$ | $1,465.15$ |
| Dow Jones Industrial Average | $\mathbf{1 0 , 5 2 5 . 3 8}$ | $10,434.96$ | $11,722.98$ |
| Dow Jones Transportation Average | $\mathbf{3 , 0 0 1 . 9 8}$ | $2,698.68$ | $2,891.63$ |
| Dow Jones Utilities Average | $\mathbf{3 4 5 . 6 4}$ | 386.52 | 302.24 |
| Dow Jones Bond Average | $\mathbf{9 9 . 5 0}$ | 96.57 | 95.80 |
| Nasdaq Composite | $\mathbf{2 , 6 2 6 . 5 0}$ | $2,653.27$ | $4,064.27$ |
| Financial Times Gold Mines Index | $\mathbf{6 5 9 . 3 1}$ | 664.06 | 893.86 |
| FT African Gold Mines | $\mathbf{6 8 5 . 4 7}$ | 676.56 | $1,183.00$ |
| FT Australasian Gold Mines | $\mathbf{7 8 6 . 0 8}$ | 802.38 | $1,089.99$ |
| FT North American Gold Mines | $\mathbf{6 3 0 . 2 8}$ | 637.83 | 764.56 |

Coin Prices

|  | $\mathbf{1 / 1 2 / 0 1}$ | Mo. Earlier | Yr. Earlier | Premium |
| :--- | ---: | ---: | ---: | ---: |
| American Eagle (1.00) | $\mathbf{\$ 2 7 5 . 2 5}$ | 277.45 | 290.40 | 4.38 |
| Austrian 100-Corona (0.9803) | $\mathbf{\$ 2 6 2 . 3 3}$ | 264.43 | 275.63 | 1.48 |
| British Sovereign (0.2354) | $\mathbf{\$ 6 6 . 6 5}$ | 67.15 | 69.85 | 7.37 |
| Canadian Maple Leaf (1.00) | $\mathbf{\$ 2 7 5 . 5 0}$ | 277.70 | 289.50 | 4.47 |
| Mexican 50-Peso (1.2057) | $\mathbf{\$ 3 2 3 . 9 0}$ | 326.50 | 340.20 | 1.87 |
| Mexican Ounce (1.00) | $\mathbf{\$ 2 6 8 . 4 0}$ | 270.60 | 282.00 | 1.78 |
| S. African Krugerrand (1.00) | $\mathbf{\$ 2 7 3 . 2 5}$ | 275.45 | 386.95 | 3.62 |
| U.S. Double Eagle-\$20 (0.9675) |  |  |  |  |
| St. Gaudens (MS-60) | $\mathbf{\$ 3 4 7 . 5 0}$ | 347.50 | 390.00 | 36.21 |
| Liberty (Type I-AU) | $\mathbf{\$ 6 7 5 . 0 0}$ | 675.00 | 675.00 | 164.57 |
| Liberty (yype II-AU) | $\mathbf{\$ 4 2 5 . 0 0}$ | 425.00 | 435.00 | 66.58 |
| Liberty (Type III-AU) | $\mathbf{\$ 3 1 4 . 0 0}$ | 314.00 | 355.00 | 23.07 |
| U.S. Silver Coins (\$1,000 face value) |  |  |  |  |
| 90\% Silver (715 oz.) | $\mathbf{\$ 4 , 0 0 0 . 0 0}$ | $4,000.00$ | $4,250.00$ | 21.62 |
| 40\% Silver (292 oz.) | $\mathbf{\$ 1 , 5 5 0 . 0 0}$ | $1,550.00$ | $1,612.50$ | 15.40 |
| Silver Dollars | $\mathbf{\$ 5 , 7 0 0 . 0 0}$ | $5,700.00$ | $6,825.00$ | 60.18 |

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $\$ 263.70$ per ounce and silver at $\$ 4.60$ per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

## Selected Mutual Funds



## South African Mining Companies, Finance Houses and Investment Trusts

|  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ASA Ltd. | ASA | \$15.50 | 14.56 | 18.50 | 20.88 | 14.06 | - |  | - | $0.600^{\circ}$ | 3.87 |
| Anglo American PLC ${ }^{2}$ | AAUK | \$57.00 | 52.25 | 69.25 | 68.00 | 36.75 | 4/05/00 | 1.060 | 9/20/00 | 0.580 | 2.88 |
| ^ Anglogold Ltd. ${ }^{3}$ | AU | \$14.31 | 14.13 | 26.69 | 28.69 | 12.25 | 2/23/00 | 0.834 | 8/09/00 | 0.511 | 9.40 |
| Avgold Ltd. | AVGLY | \$3.74 | 3.74 | 7.02 | 7.50 | 3.11 | No Dividends Declared |  |  |  |  |
| De Beers Consolidated Mines | DBRSY | \$28.75 | 26.13 | 30.75 | 30.00 | 18.19 | 3/29/00 | 0.675 | 9/13/00 | 0.345 | 3.55 |
| Gencor Ltd. | GNCRY | \$3.70 | 3.68 | 4.05 | 4.68 | 2.27 | 3/29/00 | 0.041 | 9/13/00 | 0.164 | 5.54 |
| $\star$ Gold Fields Ltd. ${ }^{4}$ | GOLD | \$3.31 | 3.28 | 4.31 | 5.69 | 2.56 | 9/15/99 | 0.045 | 2/16/00 | 0.026 | 2.1 |

$\star$ Buy. A Hold. (s) All data adjusted for splits. $\dagger$ 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. ${ }^{\circ}$ 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.

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.

