INVESTMENT GUIDE

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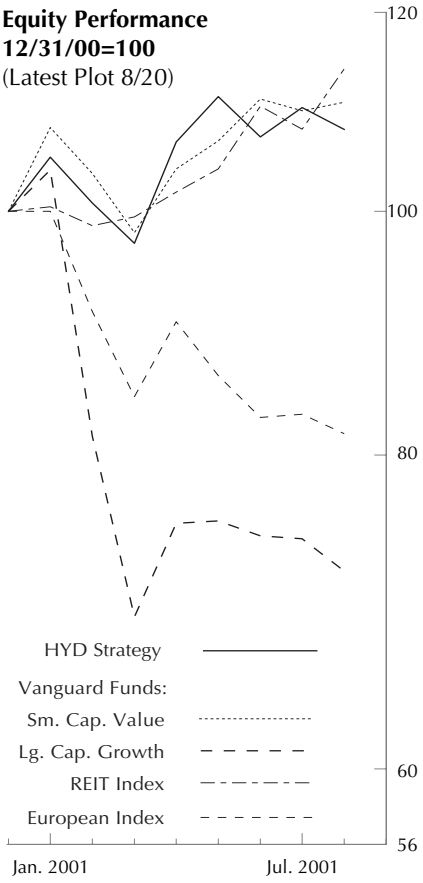

The Temptation to Time

We have gone to great lengths to explain to our readers and our clients that successful investing requires discipline. In particular it is vital that investors ignore the temptation to look backwards and bemoan what they *could have* done with regard to picking certain assets or timing the market.

The table below depicts the total returns for the S&P 500 (dividends reinvested) for the past three calendar years, and what those returns would have been had an investor missed the best ten days and the worst ten days of performance. For example, during 1999, an investor who merely held the S&P 500 for the entire calendar year would have seen his holdings grow by 21.03%. However, had he been tempted to try and "time" the market, and had he been unlucky enough to miss the 10 days with the best performance, he would have missed a cumulative 26.37%, and his portfolio would have *lost* 5.34% as a result. Conversely, had the investor instead been "all in cash" for the ten worst days, his portfolio would have grown by an impressive 45.29%.

An Analysis of Daily Volatility

		Opportunity Return[2]
1998 Returns[1]		
S&P 500	28.58%	
S&P 500 w/o best 10 days	-3.98%	32.56%
S&P 500 w/o worst 10 days	64.38%	-35.80%
1999 Returns[1]		
S&P 500	21.03%	
S&P 500 w/o best 10 days	-5.34%	26.37%
S&P 500 w/o worst 10 days	45.29%	-24.26%
2000 Returns[1]		
S&P 500	-9.10%	
S&P 500 w/o best 10 days	-40.49%	31.39%
S&P 500 w/o worst 10 days	20.78%	-29.88%
S&P 500 Total Return 1998-2000	**41.47%**	

[1] Assuming receipt of all dividends.
[2] Opportunity return is the cumulative performance of the removed days.
Source: Dimensional Funds Advisors/Yahoo! Finance.

If you can pick the winning periods, please send us your resume. We cannot, and investment newsletters or advisors who claim to be able to do so should be avoided. The next time you receive a sales call, you might ask the solicitor why he has to make his living making cold calls if he has such remarkable insight about what the market will do.

The market continually provides these lessons, yet every day in the print media, radio, and increasingly on television we are barraged by the views of pundits explaining exactly why the market did what it did and what is likely to happen next (the latter usually liberally laced with "qualifiers"). We urge our readers to adopt and maintain a passive portfolio and, except perhaps for its entertainment value, ignore all the rhetoric.

OPTIONS EXPLAINED

Among the myriad investment vehicles available to individuals, stock options have rapidly proliferated. They are used by both speculators as well as investors seeking to better manage their risk, and are being increasingly used as a form of employee compensation.

Many investors are asking the questions: What are stock options? Should they be part of my portfolio? What should I do with them once I have them? We will attempt to explain options, and explain why most individual investors do not need them. Finally, we will address employer-granted options, and address how investors might manage these as part of their overall investment plan.

Options: The Nuts and Bolts

Options fall into a category of investments known as *derivatives*, which are securities that derive their value from another security or investment, the *underlying security*. Derivatives often require a modest cash outlay and provide a high potential return. But there is no free lunch; options are risky. It is not uncommon for someone to lose his entire investment.

Options can be based on a number of financial assets as the underlying security. However, the most common are stock options.

Stock prices are determined in the market as buyers and sellers negotiate over price. The price that emerges reflects a consensus opinion regarding a firm's economic value in light of available information. When a trade is made, the buyer receives actual ownership in the company and *he retains all rights of ownership for as long as he owns the stock*. Significantly, the investor has a right to dividends and underlying assets in the event of liquidation, as well as voting rights, and may use the shares as collateral for a loan.

An *option* is a contract that gives the owner the right, but not the obligation, to buy or sell stock at a set price, called the *strike price*, before a certain date, called the *expiration date*. When an investor buys an option, he is not buying or selling actual stock, but the *ability* to buy or sell the stock under certain conditions. It carries with it none of the rights inherent in the stock itself.

There are two types of options: options to buy at the strike price, called *calls*, and options to sell at the strike price, called *puts*. A *writer* of the option contract creates the call or put option, and sells it to investors interested in buying the right to buy or sell the underlying stock.

In order to maintain an orderly market there is an established set of strike prices starting at $5. They move up in increments of $2.50 through the $30 strike level. Above $30, the increments increase to $5, and above $200, $10 increments apply. There is an exception to this price structure that occurs when a stock splits, but for purposes of our discussion these are the set strike prices. Contracts are written for blocks of 100 shares of stock.

When the owner of the option decides to buy or sell the actual stock, he tells his broker to *exercise* the option. The broker will buy or sell the stock at the strike price regardless of the current market price of the stock. At this point the option expires, but the investor has purchased the underlying shares of common stock, which he may sell or hold.

It is important to note that there is *no obligation to exercise an option*. The option contract is a right to do something, but the investor is not compelled to exercise that right. This is very important if the option moves against the investor's interest.

The longer an option's time to maturity, the greater is its value, other factors held constant. The owner of a call option has unlimited upside potential until the option expires, and a potential loss that is predetermined and limited to his original investment. Therefore, because common stocks are inherently volatile, the longer the time until expiration, the longer a call buyer has to benefit from any upside move, and the more valuable is his option.

A call option with a strike price below the current market value of the underlying security is said to be *in the money*. Conversely, a call option with a strike price above the market is considered *out of the money*. Out-of-the-money options have only time value. This makes them inexpensive but very risky. If the strike and market price are the same, then the option is said to be *at the money*.

Prevailing interest rates also affect an option's price. Buying a call option provides downside protection, since the risk is limited to the investor's investment in the option, but the option provides the potential to gain at an accelerating rate due to its inherent leverage. Buying a call option is therefore similar to buying on margin, except that there is no explicit interest charge. Therefore, the higher the interest rate, the greater the saving from options, and the greater the value of the call option.

There is a positive relationship between an option's value and the volatility of the underlying stock price. With greater volatility, there is greater potential for the call option buyer to participate in gains, and the downside protection of the option (limited to his original investment) is more valuable as well.

Options in Action

Suppose a stock is currently trading for $17. You can buy an option with a strike price of $15. This will give you the right to buy the stock for $15, no matter what happens to the market price, up to the expiration date. How much is this right worth? Though many factors determine an option's value, the option is said to have an *intrinsic value* of $2, the difference between the current price and the strike price. In other words, for a $2 purchase, you have the right to buy the stock for $15.

Suppose further that new information comes along regarding the company's prospects (the company might introduce a new product, for example) and the stock price rises to $25. What is the option's intrinsic value now? Again, it is the difference between the new market price and strike price, or $10. This is a 400% increase considering your original $2 investment. Note that options provide significant leverage; if you had simply bought the shares at $17 originally, they would be now worth $25, for an increase of $8, a nice return of 47%, but only a fraction of 400%.

Now suppose the company president resigns under threat of lawsuit and the stock price drops to $10. The difference between market price and strike price is now *minus* $5. Remember, you are not obligated to exercise the option, therefore, you do not actually have to pay $5. However, the option itself now has no value. At this point your $2 original investment is worthless, though your loss is limited to $2.

The expiration date is a key determinant of an option's value. Options contracts are written to expire at monthly intervals at noon on the third Saturday of the month. For all practical purposes,

since markets are closed on Saturday, this means options expire at the close of markets on Friday (expiring options represent one of the "witches" on "triple witching day" often discussed in the media). In our example above, the $15 strike price call option might expire in November. This gives you the right to buy the stock for $15 anytime up to the close of markets on the third Friday of November. After that date, the expired option is worthless.

Returning to the optimistic scenario, where the company introduces a new product, suppose the subsequent price rise takes place before the expiration date. The option's value has increased 400%. On the other hand, suppose the lawsuit takes place and the expiration date comes before the stock has had a chance to recover. Since the actual market price is lower than the strike price, the option is worthless.

The longer the time until expiration, the more valuable is the option. In our lawsuit scenario, a longer-term option might allow the stock to recover before the expiration date. Similarly, in the new product scenario, a short-term option that expires before the new product announcement would miss the price rise that a longer-term option might catch.

In our example a call buyer would have a range of options from which to choose. In addition to the November $15 call these might include an October $12.50 call option or a December $17.50 call. Depending on what happens to the market price of the stock, which in turn depends on new information, each option would gain or lose value.

Put options, or the right to sell, are the mirror image of call options. An owner of a put has the right to sell the underlying stock at the strike price. Therefore, a put gains value when the market price goes down because an investor can sell the stock for more than it is worth in the market. Conversely, a put loses value when the market price of the underlying stock rises.

Options: The Writer's Point of View

The writer of a put or call option originates the contract and sells it to the buyer. While buying a call option is generally considered speculative, writers of call options are often hedging against risk. An investor who is nervous that the shares he holds might plummet could write a call option to hedge this risk. The writer of the option gains an immediate source of income by selling the option. If the shares fall, he will have this income to offset this loss in value. However, he would sacrifice any gain that would result if the stock's price instead subsequently rose above the strike price, since his shares would be called away. This strategy is known as a "covered" call option; it provides downside protection in exchange for accepting limits on gains. It provides a stockholder with a degree of certainty. Writers of "naked" call options, on the other hand, are speculating, since they do not own the underlying shares; they are betting on a drop in the share price.

Options: The Pros and Cons

Options have a significant advantage because they allow investors to participate in the movement of stocks that might otherwise prove prohibitively expensive. For example, at 2:45 pm on August 1, 2001, the market price of IBM was $106.88. Therefore, to buy 100 shares of IBM, an investor would have to pay $10,688 plus a commission. On the other hand, the price for an August $100 call option was $7.90, so an investor would have had to pay only $790 plus commission for one contract for the right to buy 100 underlying shares at $100 per share.

If investors wish to exercise their options, this advantage vanishes because they must put up the cash to purchase the underlying shares. However, the Chicago Board Options Exchange provides a very active secondary market where the actual options trade, so investors can realize the value of their options at any time without exercising them.

Options also provide financial leverage. Continuing with the IBM example, if the investor bought the underlying shares and in a week IBM was trading at $110, the investor would have shares worth $11,000, or a 2.9% gain on his original investment of $10,688. On the other hand, if he had purchased the option for $790, the intrinsic value of the option a week later would be $1,000 (based on the difference between the $100 strike price and the $110 market price), for a total return of 26.6% on his $790 outlay.

Options provide tremendous flexibility to meet an investor's particular risk parameters. On the same day (August 1) a September $100 call on IBM was $9.70 and an October $100 call would have been $11.60. Investors who wanted to pay far less could have gone out of the money and bought an August $110 call for only $1.30. But would you want to take the risk that IBM would get to $111.30—your break even point (the strike price plus what you paid for the option)—by August 17th (the third Friday of August), only 12 trading days away? If you wanted more time out of the money, the September $110 call would have cost $3.30.

The IBM example demonstrates that options do not offer a "free lunch"; the greater the potential gains from leverage the greater the risk an investor must necessarily assume. If the investor had purchased the August out-of-the-money $110 calls for $130, and IBM's share price jumped from $106.88 to $115 before the 12-day expiration, the intrinsic value of the option would rise to $500, a 284% increase over the $130 purchase! However, there would be a very high probability that the investor's options would expire worthless (indeed they did; through August 17th, IBM's share price never exceeded $108.80).

For many investors the greatest disadvantage of options is that they must commit a great deal of time in order to manage them effectively. Investors in the options game have to pay constant attention to the market for price movements that could affect them in very serious ways. They need to follow the specific shares underlying the option, especially as the options approach expiration, and be ready to make a move at a moment's notice. If you are not a professional investor or trader, this is time consuming and can be stressful.

Employee Stock Options

Companies increasingly provide stock options to employees as a form of compensation. A prime reason, especially among start-up companies, is that options avoid large cash outlays for salaries or bonuses. Firms often grant options with higher strike prices as the stock price rises. The onus then falls on the employees, when they exercise the option, to put up the cash to purchase the stock. Companies also get a tax deduction when employees exercise their nonqualified stock options (NQSOs). Options also give employees greater incentive to make the company profitable and to remain employed with the firm. Firms issue employee stock options with vesting rights. Employees might be allowed to exercise 25% of their rights each year over a four-year period. This provides employees some relief from the need to make an immediate decision when the options are

issued, but employees should thoroughly understand their choices.

NQSOs are the most common type of employee stock option. These do not meet IRS qualified retirement plan parameters. When NQSOs are exercised, the employee pays taxes on the difference between the current market price of the shares and the strike price, and the difference is taxed as ordinary income, which can exceed 40% when federal and state income taxes are considered. This tax liability is generated regardless of whether the underlying shares are held or sold. Any increase in the underlying share price between the time the options are exercised and the realized shares are sold is taxed as long-term capital gains (at 20%), as long as shares are held for 12 months.

Incentive Stock Options (ISOs) have greater tax advantages, but the IRS limits their issuance. ISOs do not generate a tax liability until the underlying shares are sold, when all gains are taxed at the long-term rate of 20%, as long as the shares are held for one year after the date of exercise and two years after the options were granted. For example, if you had 500 ISOs to purchase stock at $5 per share and you exercised these ISOs when the stock rose to $10 per share, there would be no taxable compensation income generated as a result of exercising the options, as there would be with NQSOs. If you later sold the stock for $25 a share, and met both holding period requirements, you would pay tax on the entire gain of $20 per share at the long-term capital gain rate. ISOs also are subject to the Alternative Minimum Tax.

Employees with stock options must decide when to exercise them, and whether to immediately sell or hold the shares they purchased by exercising the options. When making these decisions, they should determine the value of their options as a percentage of their entire portfolio value, and treat them as one component of a comprehensive investment plan. The options will fit into a particular asset class (e.g. large-cap growth stocks, small-cap value stocks), depending on the classification of the underlying shares (every quarter we issue recommended asset class allocations in the ***INVESTMENT GUIDE***). Diversification within the asset class is important as well, so the options' value should only comprise a portion of the target allocation for that particular asset class.

Though it might be tempting to try to time the exercise of the options at a "peak" of the underlying stock price, this is inconsistent with our view that assets are rationally priced. Investors should develop a plan to periodically exercise their options rather than trying to outsmart the market. If investors have accumulated numerous options with a variety of expiration dates, a good strategy might be to exercise their options just before these expiration dates, in effect using the dates to systematically acquire the underlying shares rather than trying to time the market. By holding the options as long as possible, the investor will continue to benefit from the leveraged returns resulting from any price rise in the shares. At the same time the need to provide the cash outlay to fund the purchase, as well as the substantial tax liability due (on NQSOs) will be forestalled for as long as possible.

More risk-averse investors might accelerate the process by regularly exercising their options at shorter intervals to protect against a sharp decline in the underlying share price. Those with very high exposure to their company's stock (which is also presumably the company providing their salary) should be even more inclined to follow this course.

Once the options have been exercised, the employee must decide whether to sell the shares immediately, or to hold them. If the shares are held for at least 12 months, any appreciation will qualify for long-term gain treatment. However, many employees in the technology sector learned that this can be risky. An employee might have exercised NQSOs with a $10 strike price on shares that had skyrocketed to $60 in a matter of months. He would owe ordinary income taxes at a rate as high as 40% on the $50 gain regardless of whether he held or sold the shares. If he then sold the shares immediately he would convert his $50 paper gain into realized gains. But if instead he held the underlying shares for 12 months, the shares might well have fallen back to $10 or less, leaving him with a huge tax bill but no appreciation in the shares.

The optimal strategy will clearly depend a great deal on individual circumstances, and most option holders should consult their accountant when forming a plan.

Weighing the Options

Options are valuable financial instruments that serve to enhance the efficiency of capital markets. We have only touched the surface with regard to stock options and their potential uses. There are numerous techniques and strategies that the sophisticated investor can learn to manage risk and return, including covered calls, straddles, spreads, and buying long-term options (called LEAPS).

However, most individual investors do not need to enter the options market in order to meet their financial goals. The capital markets have enormous potential for providing financial security through the common stocks and mutual funds that we recommend. These opportunities are there for the taking, and the best way to seize them is through a passive strategy that does not require specialized knowledge or constant attention. Employees who receive stock options should formulate a systematic plan for exercising their options and for liquidating the options they receive, and should avoid the temptation to time the market.

OUR INVESTMENT APPROACH: FREQUENTLY ASKED QUESTIONS

You frequently write that "stock picking" should be avoided in favor of a passive index-type investment strategy. Yet you recommend specific stocks through the high-yield Dow 4-for-18 approach. Isn't this a contradiction?

No. The high-yield Dow (HYD) approach is a passive means of identifying stocks with higher-than-average expected returns. Passive selection, as opposed to active management, means we do not "analyze" these companies in the hope of profiting from the discovery of some previously unknown information. Markets work very quickly to reflect publicly available information as soon as it becomes available. Sometimes the market overreacts, and sometimes it underreacts, but there is overwhelming evidence that these episodes are random and therefore unpredictable, so that active managers are wasting their time and their clients' money.

Stocks with low price/earnings, low price/book multiples or high dividend yields have historically outperformed "growth" stocks over time, not because these shares are "undervalued" in light of available information, but because the

market has deemed them to be riskier than average. Stocks with above average risk also have above average expected returns (note that we refer to *expected* returns, if above average returns were a certainty, there would be no risk). By holding a portfolio of these securities over a long time frame, investors have a good chance of obtaining returns that will outperform the overall market.

Investors can pursue value stocks passively by purchasing the Vanguard Value Index or the iShares S&P Value Index, which invest in those stocks in the S&P 500 with below average price/book ratios; this would be especially appropriate for smaller accounts. However, while the HYD stock selection strategy is less diversified, our research indicates that the approach provides better prospects over the long term.

If academic research demonstrates that value stocks have higher returns than growth stocks or total market portfolios over the long run, why not put 100% of the equity allocation in a value approach, such as HYD or low price/book stocks?

If one defines risk solely in terms of volatility, this might be appropriate, but for most investors risk is not so simple.

The high-yield Dow approach has indeed provided returns in excess of the Dow Jones Industrial Average, with only modestly higher volatility (as measured by standard deviation), as demonstrated in the box on page 62. However, standard deviation does not encompass all forms of risk. After all, a stock that declines in value by 2% a day for a year would have a standard deviation of zero because it would have a perfectly stable downward trajectory, but few investors would consider this to have been a risk-free investment. Investors in the HYD strategy would have lost money on firms such as Woolworth and Westinghouse and IBM, which underwent severe financial distress and were sold at a loss. Even though these losses were more than offset by extraordinary returns from firms that were in distress but then rebounded, some investors might find these losses too hard to swallow.

Most investors are also sensitive to the risk of their returns being different from the stock market overall, which is not reflected in a simple measure of share price variability. Between January 1997 and March 2000, the HYD portfolio provided annualized returns of "only" 15.07%, with a standard deviation of 21.68%, while the S&P 500, thanks to the dramatic rise of tech stocks, soared 26.07%, with a standard deviation of 21.78%. Thus HYD investors earned a rate of return that was almost double the long-term rate on common stocks over the preceding 50 years and saw their shares fluctuate at a rate almost identical to that of the overall market. Nevertheless, we were barraged with questions from frustrated investors as to why the HYD plan was performing "poorly."

To the extent that you are likely to be disappointed with performance that differs from a market portfolio, you should augment your core holdings of value stocks with some exposure to growth shares, such as the passively managed Vanguard Growth Index fund.

Many advisors recommend certain sectors, such as banking stocks or technology-related stocks. Why do you ignore these?

An asset class is simply a category of financial assets with unique risk-return characteristics. Again, we rely on statistical research to identify those asset classes with the greatest expected returns and unique risk-return profiles. The only unique asset class among industry types is the Real Estate Investment Trusts (REIT) sector. For a full discussion, see the April 2001 ***INVESTMENT GUIDE***.

In developing the 4-for-18 HYD strategy, you systematically examined all combinations of holding periods and the number of high-yielding stocks to hold, and selected the best result. Isn't this just "data mining"?

We have not "mined" the data to find a unique occurrence. Our initial research showed that there are hundreds of high-yield strategies that would have outperformed the market; in other words, the high-yielding Dow stocks comprise an asset class that is a desirable part of a portfolio. However, in order to ensure discipline, an investor needs concrete guidelines to follow with regard to how many stocks to purchase and how long they should be held. Therefore, we examined more than 1,080 possibilities to select a reasonable strategy with regard to risk (volatility) and expected return. We settled on the 4-for-18 approach. Though there is no reason to believe that this strategy will provide the very best combination of risk and return going forward, we are confident that it will be *among* the best.

Our approach differs a great deal from some of the more popular high-yield Dow approaches, such as the top ten highest-yielding stocks held for twelve months on a calendar year basis. These are usually based on very limited data sets. Several very complex versions have little theoretical rationale and are far more likely to constitute data mining.

If everyone followed an indexing strategy would markets still be efficient?

This question has come up repeatedly ever since indexed strategies first appeared in the mid-1970s. Critics of indexing assert that markets would be less efficient if all investors adopted a market-fund investment approach. One can accept this theoretical viewpoint and still embrace indexing with enthusiasm.

If the adoption of indexed strategies became so pervasive that market efficiency was impaired, it would be a self-correcting process. Mispriced securities would create opportunities for investors to earn profits in excess of their research costs, and their activity would drive prices back to equilibrium levels. We will never know how much information and liquidity are required for an efficient market. Markets for consumer durables such as homes or autos appear to be at least reasonably efficient, despite very poor liquidity, high search costs, and the absence of perfectly fungible assets. This behavior suggests a shift to passive investing would have to be very pronounced to have any effect on market efficiency.

Even if all professional investment managers adopted a passive approach, other market participants would continue to provide price-setting information. Sources of such information could include corporate stock buybacks, acquisitions, and the investment activities of officers, employees, competitors, and suppliers.

Vanguard launched its first index fund in 1976. Today their Vanguard 500 Index fund is the world's largest mutual fund, with over $90 billion dollars in assets. Despite the impressive commercial success of funds that follow indexed investing strategies, they still represent only a fraction of total stock market wealth.

—Dimensional Fund Advisors provided portions of this article.

THE HIGH-YIELD DOW INVESTMENT STRATEGY

We are convinced that long-term common-stock investors will receive superior returns on the "large-capitalization value stocks" 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 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.)

The model portfolio of HYD holdings set forth in the accompanying table reflects the systematic and gradual accumulation the 4 highest-yielding Dow issues that are neither General Motors nor 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 Philip Morris 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 8 years, Philip Morris has never ranked lower than fourth on the list, whatever its ups and downs, and, given the circumstances, using Philip Morris 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. This month, the stocks eligible for purchase, **Kodak, Dupont, J.P. Morgan Chase,** and **Caterpillar**, are the same four issues that were eligible in February, 2000 (18 months ago). Accordingly, the strategy does not call for any significant trades, other than rebalancing to ensure that this month's commitment to each of the four eligible issues is of equal value. This means that small amounts of Caterpillar and J.P. Morgan, which outperformed the other two issues, were sold out of the model, while additional shares of Kodak and Dupont were purchased. Most investors will find that these changes in the model's holdings will not be sufficiently large to warrant any trades. That the four stocks qualifying for purchase this month are the same four that qualified 18 months ago is a relatively rare circumstance. Usually one or two, and occasionally three, issues differ.

The model treats spin-offs as remaining a part of the commitment to the stock from which they came. The current positions in **AT&T** date from July, September, October, and November, 2000. These positions, as well as the shares in **AT&T Wireless** that were spun-off from AT&T last month (and any additional spin-offs from AT&T in the meantime), will be held

As of August 15, 2001

					——*Percent of Portfolio**——	
	Rank	*Yield*	*Price*	*Status*	*Value*	*No. Shares‡‡*
Philip Morris	1	4.85%	43.68	*	-0-	-0-
Eastman Kodak	2	3.99%	44.08	Holding**	19.5	19.0
Dupont	3	3.37%	41.51	Holding**	17.5	18.1
JP Morgan Chase	4	3.23%	42.15	Holding**	14.1	14.4
General Motors	5	3.23%	61.99	*	-0-	-0-
Caterpillar	6	2.53%	55.23	Holding**	27.0	21.1
Int'l Paper	7	2.46%	40.73	Holding	14.0	14.9
SBC Comm.	8	2.36%	43.36	-	-	-
Exxon Mobil	9	2.22%	41.50	-	-	-
Minn.Mng.& Mfg.	10	2.19%	109.65	Holding	2.9	1.1
AT&T	24	0.77%	19.55	Holding	3.9	8.6
AT&T Wireless	—	0.00%	16.49	Holding	1.1	2.8
					100.0	100.0

Change in Portfolio Value‡

	1 mo.	*1 yr.*	*5 yrs.*	*10 yrs.*	*15 yrs.*	*From 12/63*	*Std. Dev.*
Strategy	-0.4%	13.5%	17.6%	17.7%	18.7%	16.6%	19.0
Dow	-1.7%	-3.7%	14.4%	15.4%	15.0%	11.0%	16.8

* The strategy excludes Philip Morris and General Motors. ** Indicated purchases approximately offset by sales of shares purchased 18 months ago. ‡ Assuming all purchases and sales at mid-month prices (+/–$0.125 per share commissions), reinvestment of all dividends and interest, and no taxes. The 5-, 10- and 15-year total returns are annualized as are the total returns and the standard deviations of those returns since December 1963. ‡‡ Because the percentage of each issue in the portfolio by value reflects the prices shown in the table, we are also showing the number of *shares* of each stock as a percentage of the total number of shares in the entire portfolio.

Note: These calculations are based on hypothetical trades following very exacting stock selection strategies. They do not reflect returns on actual investments or previous recommendations of AIS. Past performance may differ from future results.

in the model until, January, March, April and May 2002.

Investors with sizable portfolios should be able to track the exact percentages month to month, but to avoid excessive transaction costs, investors should adjust their holdings toward the percentages in the table 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.

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., "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 4 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 full complement of the currently eligible stocks without delay. (This month, the four eligible issues—Caterpillar, DuPont, Eastman Kodak, and J.P. Morgan Chase—account for more than 75% 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 8/15/01	Market Prices 7/13/01	Market Prices 8/15/00	12-Month High	12-Month Low	Latest Dividend Amount	Latest Dividend Record Date	Latest Dividend Paid	Indicated Annual Dividend	Indicated Yield† (%)
Philip Morris	MO	**$43.68**	44.99	32.44	53.88	26.06	0.530	6/15/01	7/10/01	2.120	4.85
★ Eastman Kodak	EK	**$44.08**	45.73	62.88	65.69	35.31	0.440	9/04/01	10/01/01	1.760	3.99
★ DuPont	DD	**$41.51**	45.47	49.88	50.69	38.19	0.350	8/15/01	9/12/01	1.400	3.37
★ J. P. Morgan Chase	JPM	**$42.15**	42.55	39.65	58.38	32.38	0.340	7/06/01	7/31/01	1.360	3.23
General Motors	GM	**$61.99**	66.19	63.56	76.63	48.44	0.500	8/17/01	9/10/01	2.000	3.23
★ Caterpillar	CAT	**$55.23**	52.48	38.66	56.83	29.00	0.350	7/20/01	8/20/01	1.400	2.53
☆ International Paper	IP	**$40.73**	38.65	34.50	43.31	26.31	0.250	8/24/01	9/14/01	1.000	2.46
SBC Comm.	SBC	**$43.36**	41.95	42.00	59.00	38.20	0.256	7/10/01	8/01/01	1.025	2.36
Exxon Mobil (s)	XOM	**$41.50**	42.99	40.66	47.72	37.60 *L*	0.230	8/13/01	9/10/01	0.920	2.22
☆ Minn. Min. & Mfg.	MMM	**$109.65**	112.23	94.88	127.00	80.50	0.600	8/24/01	9/12/01	2.400	2.19
Procter & Gamble	PG	**$72.18**	68.14	62.75	79.31	55.96	0.380	7/20/01	8/15/01	1.520	2.11
Merck	MRK	**$68.90**	61.50	73.25	96.69	60.35	0.350	9/04/01	10/01/01	1.400	2.03
Honeywell Intl.	HON	**$37.32**	36.50	35.38	55.69	33.00	0.188	8/20/01	9/10/01	0.750	2.01
Alcoa	AA	**$36.08**	41.46	34.25	45.71	23.13	0.150•	8/03/01	8/25/01	0.600•	1.66
General Electric	GE	**$41.78**	47.45	57.25	60.50	36.42	0.160	7/09/01	7/25/01	0.640	1.53
Coca-Cola	KO	**$47.58**	46.01	62.00	63.38	42.37	0.180	9/15/01	10/01/01	0.720	1.51
Hewlett-Packard (s)	HWP	**$24.10**	27.98	55.50	63.22	23.45 *L*	0.080	9/19/01	10/10/01	0.320	1.33
Citigroup (s)	C	**$48.60**	48.86	73.94	59.13	39.00	0.160	8/06/01	8/24/01	0.640	1.32
United Tech.	UTX	**$70.84**	75.15	60.06	87.50	59.00	0.225	8/24/01	9/10/01	0.900	1.27
Johnson & Johnson (s)	JNJ	**$57.00**	53.05	48.05	57.05 *H*	40.25	0.180	8/21/01	9/11/01	0.720	1.26
Boeing	BA	**$54.44**	55.07	47.25	70.94	45.31	0.170	8/17/01	9/07/01	0.680	1.25
American Express	AXP	**$38.66**	39.36	59.19	63.00	34.00	0.080	7/06/01	8/10/01	0.320	0.83
Walt Disney	DIS	**$26.62**	28.19	40.50	41.94	26.00	0.210	12/08/00	12/22/00	0.210	0.79
☆ AT&T	T	**$19.55**	20.87	31.25	24.76	12.41	0.038	6/29/01	8/01/01	0.150	0.77
McDonald's	MCD	**$28.49**	27.65	32.44	35.06	24.75	0.215	11/15/00	12/01/00	0.215	0.75
Wal-Mart Stores	WMT	**$52.00**	52.90	51.56	58.75	41.44	0.070	6/22/01	7/09/01	0.280	0.54
IBM	IBM	**$105.01**	108.53	122.00	134.94	80.06	0.140	8/10/01	9/10/01	0.560	0.53
Home Depot, Inc.	HD	**$49.19**	48.70	53.50	56.81	34.69	0.040	6/14/01	6/28/01	0.160	0.33
Intel Corp.	INTC	**$29.78**	30.19	67.88	75.81	22.25	0.020	8/07/01	9/01/01	0.080	0.27
Microsoft Corp.	MSFT	**$63.20**	71.39	71.63	76.15	40.25	0.000	-	-	0.000	0.00
☆ AT&T Wireless	AWE	**$16.49**	16.95	25.75	27.30	15.29	0.000	-	-	0.000	0.00

★ BUY. ☆ HOLD. † Based on indicated dividends and market price as of 8/15/01. *H* New 52-week high. *L* New 52-week low. (s) All data adjusted for splits. • Excludes extras.

Note: The issues indicated for purchase (★) 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 (☆) 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

	8/15/01	*Mo. Earlier*	*Yr. Earlier*
Gold, London p.m. fixing	**275.35**	266.35	274.15
Silver, London Spot Price	**4.23**	4.25	4.87
Copper, COMEX Spot Price	**0.66**	0.70	0.87
Crude Oil, W. Texas Int. Spot	**27.56**	26.59	31.68
Dow Jones Spot Index	**106.83**	104.80	110.35
Dow Jones-AIG Futures Index	**103.78**	103.64	102.89
CRB-Bridge Futures Index	**201.62**	207.31	218.69

Interest Rates (%)

U.S. Treasury bills -	91 day	**3.42**	3.57	6.25
	182 day	**3.38**	3.53	6.35
	52 week	**3.32**	3.46	6.19
U.S. Treasury bonds -	15 year	**5.53**	5.72	6.04
Corporates:				
High Quality -	10+ year	**6.86**	7.03	7.68
Medium Quality -	10+ year	**7.46**	7.67	8.14
Federal Reserve Discount Rate		**3.25**	3.25	6.00
New York Prime Rate		**6.75**	6.75	9.50
Euro Rates	3 month	**4.43**	4.46	4.84
Government bonds -	10 year	**4.84**	4.97	5.10
Swiss Rates -	3 month	**3.19**	3.23	3.38
Government bonds -	10 year	**3.29**	3.36	3.89

Exchange Rates

British Pound	**$1.446700**	1.403900	1.500600
Canadian Dollar	**$0.655500**	0.650800	0.674800
Euro	**$0.915500**	0.854700	0.907400
Japanese Yen	**$0.008355**	0.008004	0.009205
South African Rand	**$0.121200**	0.121000	0.143500
Swiss Franc	**$0.602700**	0.564700	0.582100

Securities Markets

	8/15/01	*Mo. Earlier*	*Yr. Earlier*
S & P 500 Stock Composite	**1,178.02**	1,215.68	1,484.43
Dow Jones Industrial Average	**10,345.95**	10,539.06	11,067.00
Dow Jones Transportation Average	**2,833.66**	2,940.35	2,884.41
Dow Jones Utilities Average	**339.60**	361.24	359.95
Dow Jones Bond Average	**103.56**	102.49	96.70
Nasdaq Composite	**1,918.89**	2,084.79	3,851.66
Financial Times Gold Mines Index	**826.09**	777.74	756.01
FT African Gold Mines	**897.91**	877.20	896.99
FT Australasian Gold Mines	**918.60**	908.32	879.90
FT North American Gold Mines	**783.34**	724.51	689.14

Coin Prices

	8/15/01	*Mo. Earlier*	*Yr. Earlier*	*Premium*
American Eagle (1.00)	**$274.35**	273.75	280.45	-0.36
Austrian 100-Corona (0.9803)	**$261.43**	260.83	267.23	-3.15
British Sovereign (0.2354)	**$66.35**	66.25	67.85	2.36
Canadian Maple Leaf (1.00)	**$274.60**	274.00	280.70	-0.27
Mexican 50-Peso (1.2057)	**$322.80**	322.10	329.90	-2.77
Mexican Ounce (1.00)	**$267.50**	266.90	273.50	-2.85
S. African Krugerrand (1.00)	**$272.35**	271.75	278.35	-1.09
U.S. Double Eagle-$20 (0.9675)				
St. Gaudens (MS-60)	**$327.50**	342.50	355.00	22.93
Liberty (Type I-AU)	**$675.00**	675.00	675.00	153.38
Liberty (Type II-AU)	**$425.00**	425.00	435.00	59.53
Liberty (Type III-AU)	**$302.50**	307.50	325.00	13.55
U.S. Silver Coins ($1,000 face value)				
90% Silver (715 oz.)	**$4,200.00**	4,200.00	4,087.50	38.87
40% Silver (292 oz.)	**$1,550.00**	1,550.00	1,572.50	25.49
Silver Dollars	**$6,075.00**	6,075.00	5,750.00	85.65

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $275.35 per ounce and silver at $4.23 per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

Recommended Mutual Funds

	Ticker		*Month*	*Year*	*— 52-Week —*		*Distributions Latest 12 Months*		*Yield*
Short-Term Bond Funds	*Symbol*	*8/15/01*	*Earlier*	*Earlier*	*High*	*Low*	*Income*	*Capital Gains*	*(%)*
★ Fidelity Target Time Line 2003	FTARX	**$9.48**	9.42	9.07	9.49	9.06	0.6013	0.0000	6.34
★ USAA Short Term Bond	USSBS	**$9.94**	9.87	9.61	9.95	9.55	0.6476	0.0003	6.52
★ Vanguard Short-term Corporate	VFSTX	**$10.87**	10.80	10.50	10.88	10.48	0.7092	0.0000	6.52
Income Equity Funds									
★ Duff & Phelps Utilities Income[1, 2]	DNP	**$10.95**	10.90	9.88	11.01	10.83	0.7800	0.0000	7.12
★ Vanguard REIT Index	VGSIX	**$12.71**	12.22	11.68	12.56	10.67	0.8100	0.0000	6.37
Large Cap. Value Equity Funds									
★ iShares S&P 500 Value Index[3]	IVE	**$59.10**	61.15	62.55	67.00	55.00	0.7618	0.1472	1.29
★ Vanguard Value Index	VIVAX	**$20.33**	21.04	22.98	23.95	19.55	0.3380	1.4400	1.66
Small Cap. Value Equity Funds									
★ iShares Sm. Cap. Value Index[3]	IJS	**$85.13**	83.81	na	86.58	66.63	0.5054	0.3430	0.59
★ Vanguard Sm. Cap Value Index	VISVX	**$10.28**	10.10	9.04	10.70	8.59	0.0820	0.6900	0.80
Growth Equity Funds									
★ iShares S&P 500 Growth Index[3]	IVW	**$59.16**	60.71	89.03	92.23	52.88	0.2786	0.1124	0.47
★ Vanguard Growth Index	VIGRX	**$26.28**	26.99	39.59	40.88	23.76	0.1250	0.0000	0.48
Foreign Equity Funds									
★ iShares S&P Europe 350 Index[3]	IEV	**$62.10**	61.00	na	80.75	59.02	0.7756	0.0000	1.25
★ T Rowe Price European Stock	PRESX	**$17.08**	16.44	23.49	23.81	16.09	0.1600	1.4200	0.94
★ Vanguard European Stock Index	VEURX	**$21.71**	20.92	27.86	28.02	20.46	0.4330	0.0000	1.99

Recommended Gold-Mining Companies

	Ticker		*Month*	*Year*	*— 52-Week —*		*Distributions Latest 12 Months*		*Yield*
	Symbol	*8/15/01*	*Earlier*	*Earlier*	*High*	*Low*	*Income*	*Capital Gains*	*(%)*
Anglo American PLC, ADR	AAUK	**$12.92**	14.80	26.97	18.25	12.17	0.460	Semiannual	3.56
★ Anglogold Ltd., ADR	AU	**$18.00**	18.14	20.25	22.34	12.25	0.823	Semiannual	4.57
ASA Ltd.[1]	ASA	**$18.50**	18.75	16.75	22.90	14.06	0.600	Quarterly	3.24
★ Barrick Gold Corp.†	ABX	**$16.40**	15.29	17.06	19.38	12.31	0.220	Semiannual	1.34
★ Gold Fields Ltd., ADR	GOLD	**$4.41**	4.09	3.72	5.25	2.56	0.162	Semiannual	3.68
★ Homestake Mining	HM	**$8.56**	7.82	5.44	8.60	3.50	0.050	Semiannual	0.58
★ Newmont Mining	NEM	**$21.06**	18.86	18.63	24.60	12.75	0.120	Quarterly	0.57
★ Placer Dome†	PDG	**$11.31**	10.20	8.69	12.48	7.25	0.100	Semiannual	0.88
★ Rio Tinto PLC, ADR‡	RTP	**$68.00**	72.70	69.75	85.00	55.13	2.340	Semiannual	3.44

★ Buy. ☆ Hold. (s) All data adjusted for splits. † Dividend shown is after 15% Canadian tax withholding. ‡ Dividend shown is after 15% U.K. tax withholding on a portion of the total. na Not applicable. [1] Closed-end fund, traded on the NYSE. [2] Dividends paid monthly. [3] Exchange traded fund, traded on ASE.