

# INVESTMENT GUIDE

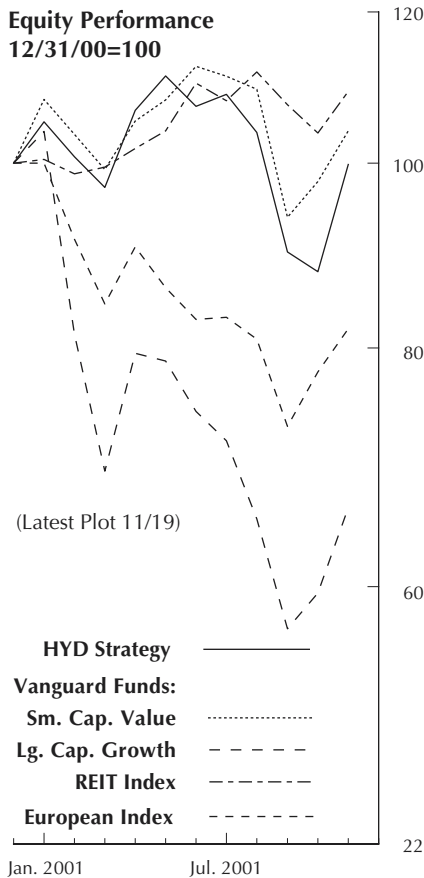
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## Great Expectations

By mid-November, the stock market, as measured by the S&P 500 price index, had recovered from the post-September 11<sup>th</sup> sell-off, and was higher than its level just prior to the attacks. The rebound occurred amidst the release of data that almost certainly confirmed that the U.S. economy had entered recession. It remains to be seen whether this stock-market buoyancy will continue, but wise investors will not spend time pondering short-term possibilities. A better approach is to focus on longer time periods.

Over the very long term, between January 1926 and October 2001 the S&P 500 provided average annual returns of 10.61%. Nevertheless, in our role as investment advisors we continue to receive inquiries suggesting that many investors expect common stocks to provide annual returns well above 12%. The extraordinary bull market that began in 1982, after all, provided average total returns of 18.4% per year before the great growth-stock melt down began in April 2000. Moreover, there were several sharp declines during this bull market, but stocks always recovered rapidly.

But memories are short. *During the fourteen-year stretch between January 1968 and January 1982, just preceding that bull market, the S&P 500 provided average annual returns of only 5.84%, while 30-day U.S. T-bills averaged 7.19%! If price inflation is taken into consideration, the annual return from stocks falls to -1.57%, while that from T-bills falls to -0.32%.*

Have we entered a new era in which sharp declines are nothing but short-term buying opportunities, or will the market "revert to the mean" by providing several years of negative and single-digit returns?

Our approach is based on an analysis of historical data. While we cannot predict the timing or the magnitude of the market's aggregate price level from year to year, our observations suggest that the market's performance during the last eighteen years is unlikely to be replicated over the next eighteen years. The market has clearly benefited from many positive developments including moderating price inflation, reduced regulation, new technologies, lower marginal tax rates, and freer trade. The extent to which the economy and the stock market will continue to benefit depends a great deal on government policy and how rapidly the initial, positive impact of those trends may diminish.

We will predict that should a period of prolonged single-digit returns ensue, investors will become more cost-conscious. In such an environment investment products and service providers will be squeezed. The plethora of mutual funds (there are currently more mutual funds than there are common stocks) will be consolidated, and "full service" stockbrokers will be forced to reduce their fees.

Our clients and readers are a step ahead. We will continue to research and publish our findings about the most cost-effective means of managing a portfolio, as exemplified in this month's discussion of exchange-traded funds.

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## EXCHANGE TRADED FUNDS

The attacks of September 11 provided a stark reminder of the random nature of life as well as the perils of market timing. Instead of attempting to forecast the future, investors will be better served by adopting a passive investment approach, focusing on goals that are within their control: discipline, diversification and cost. Exchange-traded Funds (ETFs) are a fairly recent financial innovation that can be employed to achieve all three.

You may be familiar with ETFs; they have clever names like Cubes, Diamonds, Holders, Spiders, Vipers and Webs. The chart below shows how ETFs have grown since their introduction in 1993. Assets invested in exchange traded funds (ETF) totaled \$64.35 billion at the close of September, according to a report by the Investment Company Institute (ICI), the Washington, D.C.-based trade group for the mutual fund industry.

### ETFs: Funds that Trade

ETFs are tradable index-based mutual funds. The first was the Standard & Poor's Depository Receipt (SPDR), which sought to mirror the S&P 500 index. ETFs are set up in a variety of legal structures, including managed funds, unit investment trust (UITs) and grantor trusts. Their dividend policies and ownership rights vary. ETFs have a prospectus disclosing their investment objectives, strategy and risk—just like any other type of Regu-

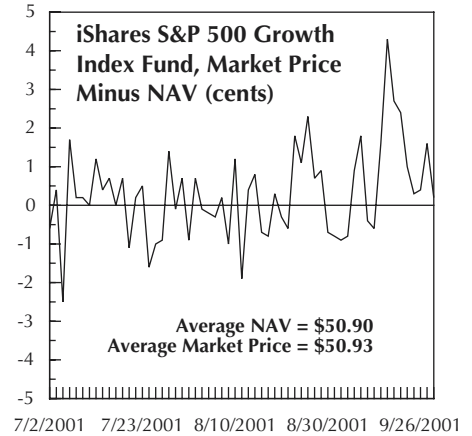
lated Investment Company.

Our recommendations include several of Barclay Global Investor's iShares (a managed ETF); these are listed on page 88. We recommend iShares for the large-cap value, small-cap value, growth, and foreign-equity asset classes.

ETFs offer instant diversified exposure to a market or market segment. ETFs invest in specific countries as well as broader international markets (e.g., Malaysian equities, European equities), market styles (NASDAQ 100, Fortune 500, the S&P 500, etc.), and specific sectors (Real Estate, Technology, B2B, etc.).

In late 1998, Merrill Lynch introduced a cousin of ETFs called HOLDRS, which are grantor trusts of fixed baskets of 20 stocks based on themes. We do not recommend these securities. Unlike index funds, the stocks in the shares of HOLDRS remain the same throughout the entire product life. They are not Registered Investment Companies and are not subject to any security concentration limitations.

Unlike conventional "open end" mutual funds, ETFs do not sell individual shares directly to investors. Shares are initially formed in large blocks, often 25,000 or 50,000 shares, known as Creation Units, and are issued typically to large institutions in exchange for a basket of securities that make up the underlying index or represent the investment



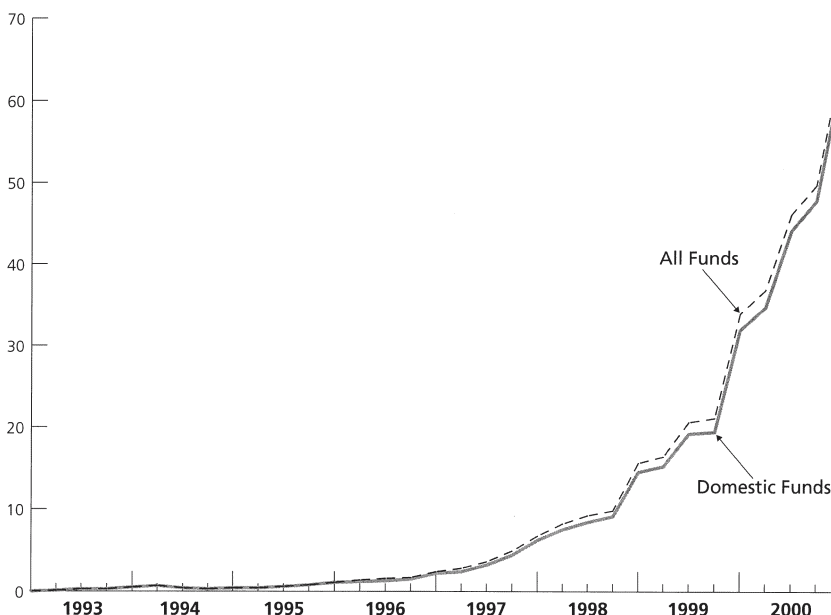
strategy. The institution then can sell its shares in the secondary market (on a stock exchange), or trade back the units with the ETF sponsor for the underlying securities and cash.

A key difference between ETFs and conventional open-end mutual funds is the way they are priced. An open-end mutual fund's price is determined at the end of the trading day and is calculated based on the closing prices of the underlying assets in the fund. This is known as its Net Asset Value, or NAV. ETF prices, on the other hand, are based on supply and demand for the fund shares themselves since they trade throughout the day on the American Stock Exchange (AMEX). However, an ETF's price will not vary significantly from its NAV. The ability to create new units and redeem units in-kind keeps the price in line with the value of the underlying securities. For example, if the ETF's market price fell below its NAV, arbitrageurs could purchase the ETFs in the open market and sell the underlying shares for a gain. Market discipline thus forces the market price and NAV to converge.

The chart above demonstrates that the disparity between recent closing market prices of the iShares S&P 500 Growth Index fund and their underlying NAVs has been negligible.

ETFs also differ from closed-end mutual funds. Closed-end funds also trade throughout the day, but their shares typically trade at a premium or a discount from their NAVs (the Duff and Phelps Utilities Income Fund, which we recommend, is an example of a closed-end fund). This disparity between price and NAV is attributable to the fact that a closed-end fund cannot be redeemed in exchange for its underlying assets.

**Total Net Assets of Exchange-traded Funds, 1993-2000**  
(billions of dollars)



Sources: Investment Company Institute and Strategic Insight Mutual Fund Research and Consulting, LLC.

Because they trade like common stocks, you can easily track the prices of your ETF investments by contacting your broker or by checking whatever stock quotation system you use.

### Are they right for you?

Like conventional index-based mutual funds, ETFs provide a simple means of managing the risk and expected returns of your portfolio. However, investors should carefully weigh all of the pros and cons of ETFs before investing.

Since ETFs are purchased in shares on an exchange, you can achieve immediate diversification in a single transaction. Intraday trading allows the purchase of shares at different prices throughout the day, unlike open-end mutual funds. Because ETFs are traded like shares of stock, they are margin eligible, can be traded with limit orders, and can also be sold short. However, they are exempt from short selling restrictions and do not require an "up tick" for a sale. No minimum investment is required for ETFs, so you can buy as many (or as few) shares as you wish, subject to brokerage commissions.

ETFs charge fees for portfolio management services and administration, as do conventional mutual funds. But ETF fees are relatively low in comparison to most managed fund products. Annual expense ratios vary from 0.09% to 0.25% for ETFs based on broad indices while the fees for sector-based and international funds range between 0.60% to 0.99%. ETF expense ratios even compare favorably with conventional mutual funds based on the same index, as shown in the table below.

ETFs can be exceptionally tax efficient. Like conventional index-based mutual funds, most ETFs track indexes that rarely change their composition. Therefore "turnovers" of underlying holdings are minimal relative to actively managed funds, as are any resulting distributions of realized capital gains.

ETF holders are also immune to other negative tax consequences to which open-end investors are potentially susceptible; ETF buyers do not have to be concerned with the possibility of "buying" an unrealized capital gain. Open-end fund managers must trade securities in order to accommodate daily share purchases and redemptions, which creates greater potential for generating taxable gains. Moreover, in the event of a large sell-off of shares (a market panic), open-end fund managers

could theoretically face mass redemptions from panicked shareholders. The subsequent sale of underlying securities could generate significant realized gains that would be passed on to shareholders who did not bail out. ETF shareholders on the other hand, simply buy shares from, or sell them to, other investors on the open market, as they would a common stock. This does not require a parallel purchase or sale of underlying securities, so these pitfalls are avoided entirely. Because ETF managers do not have to constantly accommodate purchases and redemptions, they are also arguably in a better position to be "fully invested" than an open-end fund manager because the latter typically must maintain a minimal cash balance to facilitate these transactions.

In the September 2001 *INVESTMENT GUIDE* we explained that several ETFs are well designed for tax "swapping." For example, if you owned shares in the iShares S&P 500/BARRA Growth Index Fund and sold the shares to take advantage of a capital loss, you would need to replace this asset class to maintain your desired portfolio allocation. A good substitute may be to reinvest the proceeds in Barclay's iShares Russell 1000 Growth Index Fund. By employing this strategy immediately, you can lock in a tax loss without altering your overall investment allocation strategy. The Russell Index is very highly correlated with the S&P/BARRA Growth Index except that the underlying securities differ enough so that the loss is not subject to recapture under the 30-day "wash sale rule." The wash sale rule prohibits investors from recording a tax loss on the sale of an asset if they

reinvest in a substantially identical asset within a 30-day period.

### Proceed With Caution

Certain disadvantages are inherent in more volatile ETFs such as certain sector funds with low trading volumes and insufficient historical trading information. These ETFs' share prices could deviate from their NAVs. Even our recommended funds are not invulnerable to temporary mispricing, though we are fairly confident that the ETF creation and redemption mechanism will tend to mitigate this effect with these higher-volume shares.

ETFs entail costs you would avoid with conventional open-end mutual funds. Because they must be purchased through a broker, you will have to pay a commission when you buy and sell ETFs, and you will confront market-maker spreads as well. These costs could more than offset the lower management fees and brokerage costs available through ETFs for investors making systematic investments or withdrawals. However, we recommend ETFs as long-term holdings. If trading is restricted to a few initial purchases and occasional portfolio rebalancing, these costs will not be significant, especially if a discount broker is utilized.

ETFs that are structured as UITs have a potential weakness. While open-end mutual funds reinvest the dividend from underlying securities immediately, the "UIT ETFs" generally hold dividends in non-interest-bearing accounts, which are then distributed to investors (typically quarterly) after fees are deducted. This causes a "dividend drag," because the dividends are not automatically reinvested in underlying shares. Investors can

<b>Asset Category</b>	<b>Index Tracked</b>	<b>Fund Name</b>	<b>Annual Expense Ratio</b>
Large Cap Growth Stocks	S&P 500/BARRA Growth Index	iShares S&P 500/BARRA Growth Index	0.18
		Vanguard Growth Index	0.22
Large Cap Value Stocks	S&P 500/BARRA Value Index	iShares S&P 500/BARRA Value Index	0.18
		Vanguard Value Index	0.22
Foreign Stocks	S&P Europe 350 Index	iShares S&P Europe 350 Index	0.60
Small Cap Value Stocks	S&P Small Cap 600/BARRA Value Index	iShares S&P Small Cap 600/BARRA Value Index	0.25
		Vanguard Small Cap Value Index	0.27

use these proceeds to purchase additional shares, but only by executing a purchase through their broker. This might entail a commission and market-maker spread, although some discount brokers do not charge a commission for automatic dividend reinvestment. iShares, including those we recommend, are not structured as UITs and avoid dividend drag.

Finally, the “buy-and-hold” tax efficiency ascribed broadly to index products does not apply to all ETFs because

many are based on narrow indexes that are subject to a great deal of turnover. Thus the fund can realize taxable gains in excess of many other index-based investments.

### The Bottom Line

Most ETFs have been launched during the last 3-5 years, so we are reluctant to endorse all ETFs as a better alternative to conventional open-end mutual funds. In the absence of significant empirical evidence, many uncertainties remain,

such as market price versus NAV, the impact of dividend drag on total returns of some ETFs, and whether or not tax advantages will come to fruition.

We are comfortable recommending the four ETFs listed on page 88. These funds, or the indexes on which they are based, have track records long enough to warrant a “buy” rating. However, these are only suitable as long-term holdings, and should be limited to the allocations we present in the Quarterly Review of Investment Policy.

## NOBEL 2001: THE ECONOMICS OF IMPERFECT INFORMATION

*Our recommended asset classes are based on a passive investment strategy, that is one based on selecting categories of assets that have unique historical risk-return characteristics. We do not attempt to time the market, nor do we “pick” stocks. Our conclusions are based purely on an examination of historical data. In short, we have concluded passive investing is far wiser than utilizing “active” management (stock picking and market timing).*

*We have not spent a great deal of effort pondering why passive management is superior to active management, though in academia, the debate seems endless. At the center of contention is the efficient market hypothesis. Its proponents contend, essentially, that securities price changes are based on new information, and that relevant public information is disseminated so quickly that investors, and active managers, cannot hope to profit from it.*

*Truman Clark of Dimensional Fund Advisors wrote the following article, reprinted in its entirety. We think our readers will find it encouraging. Particularly interesting is the notion that, regardless of the current state of market efficiency, information technology is lowering the cost of information, thereby driving the financial markets toward ever-greater efficiency. While we would add that technology has also proven disruptive (the 1987 stock market crash was greatly exacerbated by so-called “program trading,” and a well known quantitatively oriented, technology-driven hedge fund recently collapsed), we have little doubt that the superiority of passive investing will increase with time.*

George Akerlof, Michael Spence and Joseph Stiglitz are the winners of the 2001 Nobel Memorial Prize in Economic Science. The three scholars are credited with

introducing the concept of “imperfect information” into economic analysis. Their work shows that when some market participants possess more information than others, free markets may not produce the best allocation of resources. In extreme cases, markets may cease to function.

In perfect markets, buyers and sellers are assumed to possess the same information. Quality differences among competing products (such as different makes and models of automobiles) can be judged precisely, and price differences accurately reflect quality differences. The three Nobel winners relaxed the assumption of perfect information and examined instances where either sellers or buyers habitually possess more information than their potential counter parties. Given the persistence of “asymmetric information,” market-determined results may not be in the best interests of either buyers or sellers.<sup>1</sup>

Akerlof’s pioneering work illustrates the problem. In the used-car market, sellers have more information about product quality than buyers. To protect themselves from the danger of buying “lemons,” buyers offer lower prices than they would pay for cars with certain high quality. Because prices are depressed, sellers will hang on to good used cars. Unless solutions are devised (e.g., warranties, lemon laws, used-car dealer reputations and on-line information about the accident-repair records of individual automobiles), only “lemons” will trade. Although his analysis is innovative, Akerlof’s results are reminiscent of Gresham’s Law from the 19th century: “bad money drives out good.”

<sup>1</sup> For a concise summary and critique of the contributions of this year’s Nobel economics prizewinners, see David R. Henderson, “What the Nobel Economists Missed,” Wall Street Journal, Oct. 12, 2001, p. A14.

Grossman and Stiglitz brought the concept of imperfect information to the analysis of financial markets.<sup>2</sup> When information is widely dispersed and costly to collect, discoveries of valuable new information yield profits. Given the potential rewards, investments in the acquisition and processing of information are warranted, but rates of return on these investments diminish with their scale. It does not pay to attempt to acquire every last bit of information. It only pays to invest to the point where the marginal benefit of new information equals its marginal cost. As a result, some bits of information are left undiscovered, and financial markets can never be fully efficient in the extreme sense of being all-knowing and instantaneously correct.

Advocates of active management greeted proof that financial markets can never be fully efficient with joyous celebration, but other implications of the Grossman-Stiglitz analysis are less comforting to their cause. Although financial markets can never be perfect, they should become increasingly efficient with the passage of time. Advances in communications, computing and other technologies reduce the costs of information acquisition so it pays to gather more and ever finer bits of information. Reductions in trading costs facilitate the rapid impounding of progressively smaller bits of information into securities prices. The introduction of derivatives and other new financial instruments reduce the costs of arbitrage strategies that police the cross-sectional alignment of securities prices. Perfection is an unattainable state in the affairs of men, but financial markets are

<sup>2</sup> Grossman, Sanford J. and Joseph E. Stiglitz, “On the Impossibility of Informationally Efficient Markets.” American Economic Review 70.3 (June 1980).

closing the gap between reality and perfection continuously.

Another implication of the Grossman-Stiglitz analysis concerns the relation between the average returns of information gatherers and passive investors. While information prospectors earn higher average returns than passive investors, their additional returns are rewards for their investments in information gathering. Competition among information prospectors ensures that their rewards are limited and fair, and it also forces the rapid transmission of information discoveries to financial markets. (Only the first delivery of an information nugget is sure to yield a profit.) Passive investors forego the potential profits from information discovery, but they are also spared the expense. Passive investors get an almost "free ride" on the efforts and expenditures of information gatherers, and the prices at which they trade may be little different, on average, than the prices that would exist in a perfect market.

The important question for investors is how great are the departures of prices and returns in existing financial markets from theoretical perfection. This is an empirical issue, and it is one that Grossman and Stiglitz did not address. Eugene Fama compiled evidence from many studies, and he used it to construct a compelling case that markets are highly efficient.<sup>3</sup> While a few market participants

<sup>3</sup> Fama, Eugene F., "Efficient Capital Markets:

(e.g., corporate insiders and stock-exchange specialists) systematically may come upon new information before everyone else, it does not appear that many others in the investment industry routinely find new information first. Even if some investment managers possess skills that permit them to earn a fair rate of return on their investments in information gathering, it is not clear that they share any of their profits with their clients. As a group, active managers produce gross rates of return that equal the rates of return of buy-and-hold strategies of equivalent risk. When costs are deducted, the net rates of return of active managers average less than market rates of return. While some individual active managers do manage to beat the market over specific time periods, their numbers are small and consistent with the workings of chance. An active manager's success in one period seldom persists into subsequent time periods. Only a precious few active managers beat the market over long periods, and, in these cases, their numbers are even less than what one would expect by chance.

So what should investors make of the works of the winners of this year's Nobel prize in economics? Should they withdraw from financial markets because they are

A Review of Theory and Empirical Work." *Journal of Finance* (May 1970).

Fama, Eugene F., "Efficient Markets: II," Fiftieth Anniversary Invited Paper. *Journal of Finance* 46 (December 1991), 1575-1617.

not now and never will be absolutely perfect?<sup>4</sup> Or should they abandon passive investment strategies in favor of active strategies that offer the chance to beat the market? I think the reasoned answer to these questions is a resounding "no!" The evidence amassed by Fama is voluminous and overwhelming. Today's financial markets are brutally efficient, and it is virtually impossible for any investor to beat them consistently. Informed investors will focus their attention on long-term asset-allocation decisions implemented with low-cost, passive financial vehicles. In this way, they can guarantee that they will receive market-determined rates of return for the degrees of risk they are willing to bear. Real-world financial markets are not perfect, but they are darn close to being so!

<sup>4</sup> If someone is inclined to answer "yes" to this question, reconsideration is prudent. The original works of this year's prizewinners were published 25 or more years ago, and the Grossman-Stiglitz paper appeared in print more than 20 years ago. If the existence of a proof that financial markets can never be perfectly efficient is a revelation to someone today, isn't it a little late to take action? Many market participants have had a long time to digest this proof, and the award to Stiglitz only gives the proof a bit more luster. Information inefficiencies would have to be extreme for a decades-old proof to constitute "news" that still presents rewarding opportunities upon which to act. Further, if one deplores all things that are not perfect, financial markets as well as all of life will be continuing sources of frustration and disappointment.

## INVESTMENT NEWS BRIEFS

**H**omestake Mining Company common stock holders should have received a copy of the proxy statement/prospectus that gives notice of a special meeting to consider a merger with Barrick Gold Corporation. The terms of the merger will allow Homestake shareholders to convert each share of Homestake into 0.53 common shares of Barrick Gold. This represents a 31% premium for Homestake shareholders, based on the share price at the time the merger was announced. The board of directors of both companies have approved the terms of the deal. Homestake shareholders will vote on the merger at a special meeting on December 14, 2001. Homestake's tax counsel has rendered an opinion that the merger will be considered a tax-free exchange for U.S. federal income tax purposes. **We recommend that Homestake shareholders vote to approve this merger.**

Once again, the gold mining industry has been the target of a "mini tender offer" by TRC Capital Corporation. **We recommend that investors do not participate.** As we have discussed in the past, mini tender offers are offers for less than 5% of a company's outstanding shares and escape a great deal of SEC scrutiny. The prices offered are typically 5% to 10% below market, and appear to be an attempt to catch investors off guard. Newmont Mining shareholders have been asked to tender up to 5.3 million common shares (2.7% of Newmont's outstanding shares) at a price of \$21.66 per share, a 9% discount from the recent market price. The offer even gives TRC the right to withdraw should the share price of Newmont go below the tender price, yet it does not allow investors to reject the offer should the share price

rise before the tender period expires. **Newmont does not endorse this offer, nor do we believe there is any way that investors can benefit from it.**

**We recommend that investors with less than 100 shares of AT&T Wireless retain their current positions rather than accept a recent repurchase/rounding offer extended by the company.** The shares will be held in our 4-for-18 model until the "parent" shares (AT&T) are sold from the model. The company has offered to purchase the shares for a weighted-average market price, at a cost of \$1 per share, with a maximum fee of \$20 per account. Investors also may purchase additional shares to round their holdings to 100 shares. The same fee of \$1 per share, with a maximum fee of \$20 per account, applies. This offer expires on December 21, 2001.

## 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, 3 stocks eligible for purchase were also eligible for purchase 18 months earlier. These were **Kodak, J.P. Morgan Chase,**

and **Caterpillar**. The strategy calls for rebalancing, to ensure that this month's commitment to each of these three and **Dupont**, which is also eligible for purchase, is of equal value. This means adding to holdings of Kodak and J.P. Morgan Chase using the proceeds of sales of some Caterpillar and all the remaining **Minnesota Mining and Manufacturing**. Most investors will find that only the 3M sale and the additional Dupont and Kodak will be sufficiently large to warrant the cost of any trades.

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 in the model until, January, March, April

As of November 15, 2001

	Rank	Yield	Price	—Percent of Portfolio—		
				Status	Value	No. Shares <sup>‡</sup>
Eastman Kodak	1	6.29%	28.62	Holding**	15.6	20.4
Philip Morris	2	4.83%	47.99	*	-0-	-0-
General Motors	3	4.27%	46.85	*	-0-	-0-
JP Morgan Chase	4	3.44%	39.55	Holding**	14.7	14.1
Dupont	5	3.17%	44.11	Buying	24.9	21.1
Caterpillar	6	2.92%	47.97	Holding**	25.4	19.9
SBC Comm.	7	2.62%	39.00	-	-	-
Int'l Paper	8	2.52%	39.66	Holding	14.7	13.9
Exxon	9	2.47%	37.19	-	-	-
Honeywell Int'l	10	2.43%	30.87	-	-	-
Merck	11	2.17%	64.66	-	-	-
Minn.Mng.& Mfg.	12	2.09%	114.62	Sold	0.0	0.0
AT&T	24	0.88%	16.98	Holding	3.6	8.0
AT&T Wireless	—	0.00%	15.44	Holding	1.1	2.6
					100.0	100.0

Change in Portfolio Value<sup>†</sup>

	1 mo.	1 yr.	5 yrs.	10 yrs.	15 yrs.	From 12/63	Std. Dev.
Strategy	-1.6%	5.2	12.5%	16.5%	16.8%	16.2%	19.0
Dow	5.8%	-4.6%	11.1%	15.0%	14.5%	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.

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 some-

where 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			12-Month		Latest Dividend			Indicated		
	11/15/01	10/15/01	11/15/00	High	Low	Amount	Record Date	Paid	Annual Dividend	Yield† (%)	
★ Eastman Kodak	EK	\$28.62	34.99	47.75	49.95	24.40 L	0.450	12/03/01	12/20/01	1.800	6.29
Philip Morris	MO	\$47.99	50.48	35.75	53.88	33.88	0.580	9/17/01	10/10/01	2.320	4.83
General Motors	GM	\$46.85	44.90	57.81	67.80	39.17	0.500	11/15/01	12/10/01	2.000	4.27
★ J. P. Morgan Chase	JPM	\$39.55	33.55	40.71	57.33	29.04	0.340	10/05/01	10/31/01	1.360	3.44
★ DuPont	DD	\$44.11	40.50	43.44	49.88	32.64	0.350	11/15/01	12/14/01	1.400	3.17
★ Caterpillar	CAT	\$47.97	48.20	36.69	56.83	35.19	0.350	10/22/01	11/20/01	1.400	2.92
SBC Comm.	SBC	\$39.00	43.87	57.31	58.88	36.50 L	0.256	10/10/01	11/01/01	1.025	2.63
☆ International Paper	IP	\$39.66	37.70	36.00	43.31	30.70	0.250	11/23/01	12/14/01	1.000	2.52
Exxon Mobil (s)	XOM	\$37.19	41.65	45.19	47.34	35.01	0.230	11/09/01	12/10/01	0.920	2.47
Honeywell Intl.	HON	\$30.87	28.30	51.63	55.69	22.15	0.188	11/20/01	12/10/01	0.750	2.43
Merck	MRK	\$64.66	69.95	91.63	96.69	60.35	0.350	9/04/01	10/01/01	1.400	2.17
Minn. Min. & Mfg.	MMM	\$114.62	105.81	95.38	127.00	85.86	0.600	8/24/01	9/12/01	2.400	2.09
Boeing	BA	\$34.24	35.27	63.56	70.94	27.60	0.170	11/16/01	12/07/01	0.680	1.99
Procter & Gamble	PG	\$78.29	71.11	73.38	79.31	55.96	0.380	10/19/01	11/15/01	1.520	1.94
Alcoa	AA	\$37.50	32.00	29.25	45.71	25.88	0.150	11/02/01	11/25/01	0.600	1.60
United Tech.	UTX	\$57.75	53.02	67.06	87.50	40.10	0.225	11/16/01	12/10/01	0.900	1.56
General Electric	GE	\$41.55	38.86	52.50	56.19	28.50	0.160	9/28/01	10/25/01	0.640	1.54
Hewlett-Packard	HWP	\$22.09	18.12	35.31	44.75	12.50	0.080	9/19/01	10/10/01	0.320	1.45
Coca-Cola	KO	\$50.00	44.50	61.31	63.38	42.37	0.180	12/01/01	12/15/01	0.720	1.44
Citigroup	C	\$50.09	44.80	50.19	57.38	34.51	0.160	11/05/01	11/21/01	0.640	1.28
Johnson & Johnson (s)	JNJ	\$60.00	55.72	47.50	60.25 H	40.25	0.180	11/20/01	12/11/01	0.720	1.20
Walt Disney	DIS	\$20.30	19.15	31.81	34.80	15.50	0.210	12/08/00	12/22/00	0.210	1.03
American Express	AXP	\$34.39	30.89	57.69	59.50	24.20	0.080	10/05/01	11/09/01	0.320	0.91
☆ AT&T	T	\$16.98	19.20	20.56	21.46	12.41	0.038	9/28/01	11/01/01	0.150	0.88
McDonald's	MCD	\$28.36	29.51	33.31	35.06	24.75	0.225	11/15/01	12/03/01	0.225	0.79
Wal-Mart Stores	WMT	\$56.00	53.48	49.00	58.75	41.50	0.070	9/21/01	10/09/01	0.280	0.50
IBM	IBM	\$114.75	102.00	99.38	119.90	80.06	0.140	11/09/01	12/10/01	0.560	0.49
Home Depot, Inc.	HD	\$46.49	40.96	39.63	53.73	30.30	0.050	11/30/01	12/13/01	0.200	0.43
Intel Corp.	INTC	\$30.78	24.38	41.50	46.75	18.96	0.020	11/07/01	12/01/01	0.080	0.26
Microsoft Corp.	MSFT	\$66.12	58.06	70.06	76.15	40.25	0.000	-	-	0.000	0.00
☆ AT&T Wireless	AWE	\$15.44	14.19	20.63	27.30	12.27	0.000	-	-	0.000	0.00

★ Buy. ☆ Hold. † Based on indicated dividends and market price as of 11/15/01. 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 &amp; Commodity Prices

	11/15/01	Mo. Earlier	Yr. Earlier
Gold, London p.m. fixing	275.45	281.85	264.60
Silver, London Spot Price	4.11	4.42	4.66
Copper, COMEX Spot Price	0.67	0.63	0.83
Crude Oil, W. Texas Int. Spot	17.45	22.29	35.58
Dow Jones Spot Index	95.21	96.04	111.02
Dow Jones-AIG Futures Index	88.28	91.19	110.94
CRB-Bridge Futures Index	186.37	184.22	226.83

## Interest Rates (%)

U.S. Treasury bills - 91 day	1.89	2.25	6.35
182 day	1.99	2.21	6.34
52 week	2.29	2.32	6.14
U.S. Treasury bonds - 15 year	5.29	5.25	5.93
Corporates:			
High Quality - 10+ year	6.67	6.78	7.61
Medium Quality - 10+ year	7.47	7.49	8.25
Federal Reserve Discount Rate	1.50	2.00	6.00
New York Prime Rate	5.00	5.50	9.50
Euro Rates	3.34	3.62	5.17
Government bonds - 10 year	4.41	4.63	5.18
Swiss Rates - 3 month	2.05	2.12	3.50
Government bonds - 10 year	3.04	3.05	3.81

## Exchange Rates

British Pound	\$1.432200	1.445000	1.424000
Canadian Dollar	\$0.628800	0.641500	0.644200
Euro	\$0.884400	0.904800	0.856700
Japanese Yen	\$0.008156	0.008232	0.009186
South African Rand	\$0.104900	0.108700	0.130100
Swiss Franc	\$0.602700	0.610700	0.560900

## Securities Markets

	11/15/01	Mo. Earlier	Yr. Earlier
S & P 500 Stock Composite	1,142.24	1,089.98	1,389.81
Dow Jones Industrial Average	9,872.39	9,347.62	10,707.60
Dow Jones Transportation Average	2,454.00	2,263.26	2,841.01
Dow Jones Utilities Average	289.76	313.76	388.20
Dow Jones Bond Average	104.26	103.97	95.60
Nasdaq Composite	1,900.57	1,696.31	3,165.49
Financial Times Gold Mines Index	808.49	839.88	571.59
FT African Gold Mines	894.22	899.03	624.53
FT Australasian Gold Mines	1,001.68	963.99	711.28
FT North American Gold Mines	749.30	795.39	531.92

## Coin Prices

	11/15/01	Mo. Earlier	Yr. Earlier	Premium
American Eagle (1.00)	\$285.95	300.15	271.65	3.81
Austrian 100-Corona (0.9803)	\$272.53	285.93	258.93	0.93
British Sovereign (0.2354)	\$69.05	72.35	65.75	6.49
Canadian Maple Leaf (1.00)	\$286.20	300.40	271.90	3.90
Mexican 50-Peso (1.2057)	\$336.40	353.00	319.70	1.29
Mexican Ounce (1.00)	\$278.80	292.60	265.00	1.22
S. African Krugerrand (1.00)	\$283.75	297.65	269.75	3.01
U.S. Double Eagle-\$20 (0.9675)				
St. Gaudens (MS-60)	\$335.00	355.00	345.00	25.70
Liberty (Type I-AU)	\$675.00	675.00	675.00	153.29
Liberty (Type II-AU)	\$400.00	400.00	435.00	50.10
Liberty (Type III-AU)	\$312.50	327.50	312.50	17.26
U.S. Silver Coins (\$1,000 face value)				
90% Silver (715 oz.)	\$4,500.00	3,350.00	3,900.00	53.13
40% Silver (292 oz.)	\$1,537.50	1,330.00	1,537.50	28.11
Silver Dollars	\$5,850.00	6,050.00	5,700.00	83.99

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at \$275.45 per ounce and silver at \$4.11 per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

## Recommended Mutual Funds

	Ticker Symbol	11/15/01	Month Earlier	Year Earlier	— 52-Week — High Low	Distributions Latest 12 Months Income Capital Gains	Yield (%)
<b>Short-Term Bond Funds</b>							
★ Fidelity Target Time Line 2003	FTARX	\$9.58	9.63	9.14	9.68 9.13	0.5512 0.0000	5.75
★ USAA Short Term Bond	USSBX	\$9.87	10.02	9.59	10.04 9.58	0.6363 0.0000	6.45
★ Vanguard Short-term Corporate	VFSTX	\$10.92	10.98	10.54	11.03 10.53	0.6956 0.0000	6.37
<b>Income Equity Funds</b>							
★ Duff & Phelps Utilities Income <sup>1,2</sup>	DNP	\$11.12	11.00	10.25	11.25 9.56	0.7800 0.0000	7.01
★ Vanguard REIT Index	VGSIX	\$12.02	11.96	10.94	12.93 10.83	0.8300 0.0000	6.91
<b>Large Cap. Value Equity Funds</b>							
★ iShares S&P 500 Value Index <sup>3</sup>	IVE	\$54.78	53.45	62.63	67.00 46.30	0.8132 0.1472	1.48
★ Vanguard Value Index	VIVAX	\$18.90	18.37	23.05	23.95 16.41	0.3280 1.4400	1.74
<b>Small Cap. Value Equity Funds</b>							
★ iShares Sm. Cap. 600/Barra Value <sup>3</sup>	IJS	\$77.95	74.32	72.41	86.58 66.35	0.5723 0.3430	0.73
★ Vanguard Sm. Cap Value Index	VISVX	\$9.45	9.04	9.34	10.70 8.14	0.0820 0.6900	0.87
<b>Growth Equity Funds</b>							
★ iShares S&P 500 Growth Index <sup>3</sup>	IVW	\$59.34	55.74	78.16	81.84 48.00	0.3571 0.1124	0.60
★ Vanguard Growth Index	VIGRX	\$26.45	24.78	34.78	34.84 21.75	0.1500 0.0000	0.57
<b>Foreign Equity Funds</b>							
★ iShares S&P Europe 350 Index <sup>3</sup>	IEV	\$58.05	55.61	75.19	80.50 45.52	0.7993 0.0000	1.38
★ T Rowe Price European Stock	PRESX	\$16.05	15.15	21.58	21.84 13.07	0.1600 1.4200	1.00
★ Vanguard European Stock Index	VEURX	\$20.26	19.35	25.76	27.29 16.85	0.4330 0.0000	2.14

## Recommended Gold-Mining Companies

	Ticker Symbol	11/15/01	Month Earlier	Year Earlier	— 52-Week — High Low	Distributions Latest 12 Months Income Capital Gains	Yield (%)
Anglo American PLC, ADR (s)	AAUK	\$15.04	12.75	13.81	18.25 9.46	0.460 0.460	3.06
★ AngloGold Ltd., ADR	AU	\$17.67	16.51	13.31	22.34 12.25	0.781 0.781	4.42
ASA Ltd. <sup>1</sup>	ASA	\$18.75	18.25	14.44	22.90 14.13	0.600 0.600	3.20
★ Barrick Gold Corp.†	ABX	\$14.82	16.35	13.31	19.38 13.13	0.220 0.220	1.48
★ Gold Fields Ltd.ADR	GOLD	\$4.59	4.52	2.72	5.25 2.63	0.162 0.162	3.54
★ Homestake Mining	HM	\$7.73	8.58	3.69	9.49 3.50	0.025 0.025	0.32
★ Newmont Mining	NEM	\$20.18	21.66	13.50	25.23 12.94	0.120 0.120	0.59
★ Placer Dome†	PDG	\$10.60	11.75	7.75	13.49 7.69	0.100 0.100	0.94
★ Rio Tinto PLC ‡	RTP	\$74.66	68.50	61.56	85.00 53.70	2.350 2.350	3.15

★ 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. <sup>1</sup> Closed-end fund, traded on the NYSE. <sup>2</sup> Dividends paid monthly. <sup>3</sup> Exchange traded fund, traded on ASE.

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