

INVESTMENT GUIDE

Published Monthly by

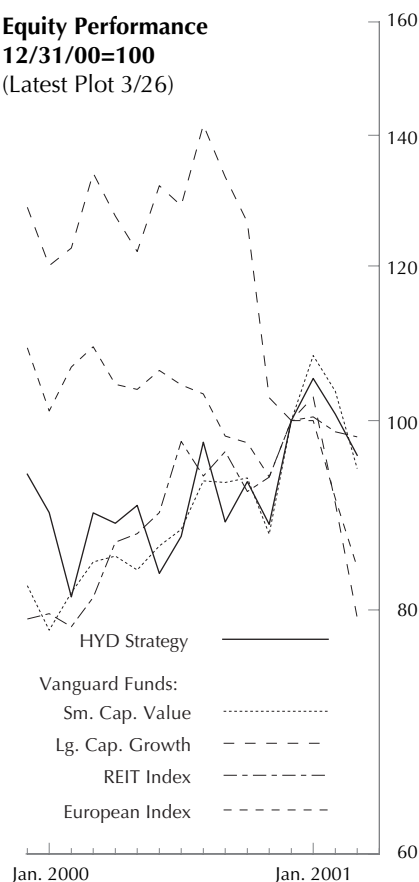
American Investment Services, Inc.

Vol. XXIII, No. 3

Great Barrington, Massachusetts 01230

March 30, 2001

Equity Performance 12/31/00=100 (Latest Plot 3/26)



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Common Stocks: Where Are We Now?

What a difference a year makes. The percentage changes in various stock price indexes from March 16, 2000, to March 15, 2001, were as shown in the accompanying table. All of the broad indexes are below their historical peaks and the prices of high-flying tech stocks, which had risen far beyond any standard of value, have collapsed farther and faster than any other sector. A sea-change in investor sentiment appears to be underway as investors become disabused of the notion that price decreases are short-lived "buying opportunities" because prices will inevitably rise to new highs.

The market's huge losses, coming on the heels of the extraordinary gains from 1995 to 1999, have left investors confused and highly uncertain. Has the market hit bottom or are further decreases likely? Do prices still reflect the "irrational exuberance" mentioned by Federal Reserve Chairman Greenspan in a 1996 speech, when the Dow was at 6,400? Are stocks now "rationally" priced? Or will they be driven by "irrational pessimism" to levels well below the long-term underlying value of businesses?

There is no simple calculus for determining whether common stocks are a "good value." Over the long-term, however, there clearly is a relationship between market valuations and other measures of corporate value. As the following analysis of broad market indicators suggests, this relationship has varied greatly over the years.

The most comprehensive measure of stock values is the total market value of common stocks as estimated by the Federal Reserve Board. This series includes equities of mutual funds and other financial intermediaries that hold common stocks themselves. To avoid "double counting" and to facilitate comparisons with other series published by the Federal Reserve, we focus on the market value of the equities of non-financial corporate businesses (NFCBs). According to newly released data, this was estimated to total \$12.35 trillion at the end of 2000.

Only a year ago, at the end of the first quarter of 2000, the value of this series reached \$15.68 trillion, a record high. Thus, during the nine months from March to December of last year, the market value of the equities of NFCBs decreased \$3.33 trillion, or 21 percent. Measuring the decline from the end of 1999 (when prices had not yet peaked), market value declined last year by 18.3 percent, the largest annual decrease since 1974.

Selected Equity Price Indicators

12-Month Change 3/16/2000-3/15/2001

Dow Jones Averages

30 Industrials	-5.6%
20 Transportation	+0.9%
15 Utilities	+27.0%

Standard and Poor's Indexes

500 Stocks	-19.5%
Utilities	+32.1%

Nasdaq Indexes

Composite	-58.9%
Insurance	+16.5%
Banks	+24.0%
Computer	-65.3%

New York Stock Exchange

Composite	-5.6%
Finance	+14.9%

Other Indexes

Russell 2000	-21.3%
Wilshire 5000	-24.1%

Source: The Wall Street Journal.

Continued on next page

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A share of common stock is ultimately a claim on the assets held by the corporation that issued it. Such claims are subject to prior claims, mainly any indebtedness of the company. Chart 1 shows the market value of the equities of NFCB's as a percent of the "net worth" (assets less liabilities) of NFCBs, measured in two ways. One, using the historical cost of tangible assets (real estate, equipment, software, and inventories) less prior claims, is the "book value" of the equity in NFCBs. The other uses either the market value or the "replacement cost" of the assets to determine the value of equity.

After increasing during the 1950s and '60s, these percentages decreased markedly between 1972 and 1974 to levels that were roughly equivalent to those of the early 1950s. By 1994 they had returned to their peaks of the 1960s. After stock prices took off in 1996, both percentages increased rapidly to levels that were not only unprecedented but, from a historical perspective, astonishing. By the end of 1999, equities were trading at 280 percent of book-value net worth, compared with 155 percent at the 1968 peak, and 195 percent of replacement-cost net worth, compared with 105 percent in 1968.

By the end of 2000, these measures of relative valuation had dropped precipitously. Data for the first quarter of 2001 are not yet available, but clearly they have decreased further. Even so, equities probably still are trading at a premium to net worth, and probably at a level that still is high when viewed from a historical perspective.

Investors focus on balance sheets only in unusual circumstances, such as mergers, bankruptcies, etc. It is the ability to generate funds from operations as ongoing businesses that usually concerns investors. Chart 2 shows the year-end market value of the equities of NFCBs in relation to three measures of this. These aggregates are dividends, earnings, and cash flow.

The first of these, dividends paid, is the most unambiguous. Earnings provide a less reliable measure of corporations' reported flows because they are affected by adjustments for inventory and depreciation and the figures reported to stockholders may differ from those reported on tax returns (from which our data are derived). To derive the earnings measure used in our chart, we exclude "phantom" gains (or losses) attributable to increases (or decreases) in the prices of current inventories. We also adjust depreciation charges to reflect replacement cost, and add the retained earnings of the foreign subsidiaries of NFCBs, which

are not included on tax returns. Cash flow is the sum of earnings and depreciation charges and is unaffected by the adjustments to depreciation charges (higher depreciation charges mean lower earnings and vice versa).

As shown, the market value of equities in NFCBs increased to 61 times dividends in 1999. The previous peak, reached in 1972, was 53. Stock valuations also reached records that were well above previous peaks in relation to earnings and cash flow. By the end of 2000 these multiples had declined markedly.

Almost certainly they have since declined further. At this point they probably still are in the high end of their historical range. However, there is no reason to believe that valuations are bound to decrease toward the bottom portion of that range anytime soon. After all, valuations fluctuated at relatively high levels between 1960 and 1972.

The most striking aspect of these charts is that the relatively short-term stock market ups and downs that most observers call "bull" and "bear" markets appear as

relatively minor blips within the much longer trends of valuation levels. Although our data go back to only 1952, there is evidence that common stock valuations during the late 1920s were comparable to those reached in the 1960s and the 1990s. Also, the low valuations of the mid-1970s through the mid-1980s probably were comparable to the levels of the 1930s and 1940s.

We do not believe that there is any inherent cyclicity to common stock valuation levels in any rigid or time-delimited sense. What this record shows, rather, is that common stock valuations have fallen to low levels when governments have followed interventionist economic policies and that higher valuations have returned when governments have tended to let markets work. Although today's equity investors appear to be unlikely to benefit from rising valuations (in the way that they did during the 1950s and 1990s), it would take a major reversal of the direction of government policies to bring valuations significantly downward.

Chart 1
Market Value of Equity of U.S. Nonfinancial Business Corporations as a Percent of Net Worth

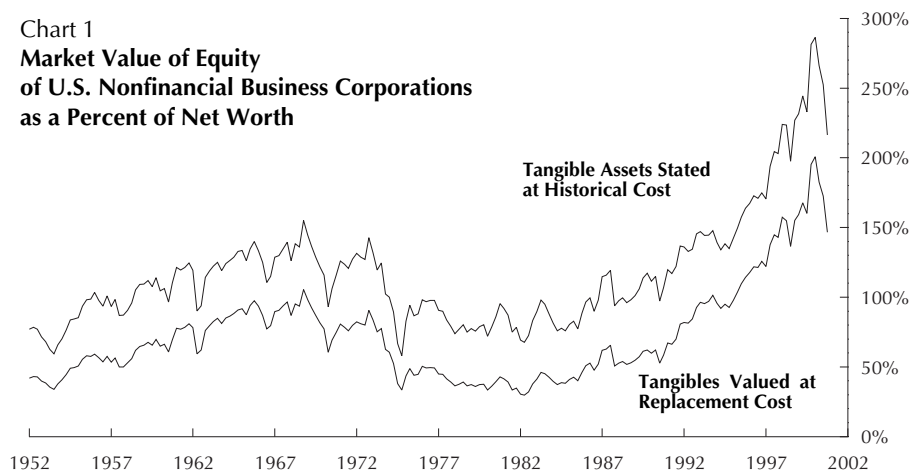
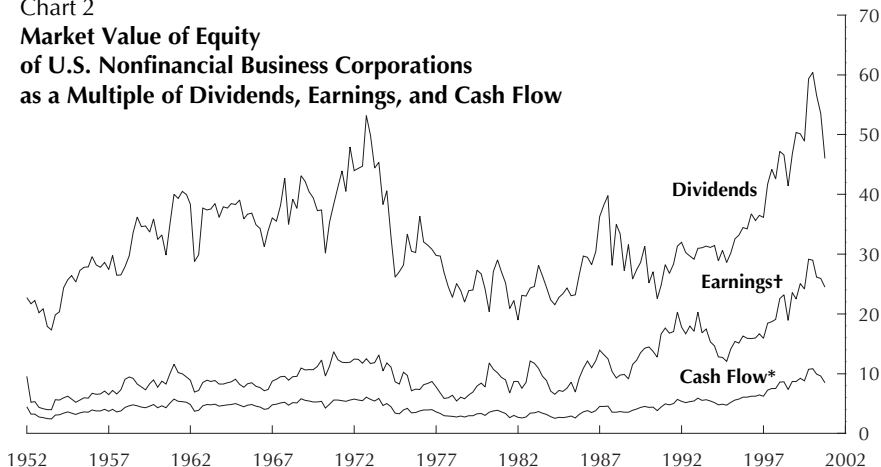


Chart 2
Market Value of Equity of U.S. Nonfinancial Business Corporations as a Multiple of Dividends, Earnings, and Cash Flow



* Includes inventory valuation adjustment.

† Includes capital consumption adjustment and retained earnings of foreign subsidiaries.

Source: Federal Reserve Board, *Balance Sheets for the U.S. Economy and Flow of Funds Accounts*.

FIXED-INCOME INVESTMENT STRATEGIES

Most investors should consider fixed-income investments as part of a well-diversified portfolio. The percentage allocated to fixed income investments is largely a function of your tolerance for risk (volatility) for your overall portfolio. Relative to common stocks, bonds lend stability to a portfolio, though they reduce expected return. Each quarter we publish our recommended portfolio allocations for various asset classes, including bonds, for investors with differing attitudes toward risk. This article is concerned with developing a fixed-income strategy once your desired allocation to bonds has been established.

Notes and Bonds: An Overview

While a bond in simplest terms can be thought of as an IOU that is issued by an entity in order to finance its activities, the financial markets are highly innovative and have spawned numerous fixed-income vehicles to match the specific needs of both borrowers and lenders. There are myriad bond issuers, including state and local governments, corporations and others. Many varieties of bonds are available, with a host of features. Just to cite a few examples, prospective buyers can find bonds that are convertible to common stock, as well as zero-coupon issues, and bonds that can be “called,” or retired, by the issuer.

For most investors, we recommend high-quality corporate issues (rated AA or better by Moody’s credit rating service) or securities issued by the U.S. government or its agencies. Most of these include a promise to pay a stated rate of interest semiannually (the coupon rate), based on the par value of the bond, and a promise to pay the face value of the bond at maturity. Many instruments of less than 10-year maturity are called notes. Throughout this article, however, we refer to all of these instruments as bonds.

After they are issued, bonds trade in a very active secondary market. Because their interest payments are fixed, bond prices are inversely related to prevailing market interest rates. For example, suppose you purchase a bond when it is first issued that promises to pay eight percent per year for the next 30 years. If prevailing long-term market interest rates subsequently fall to six percent, your bond will be more valuable than new issues with a similar maturity, so the market price of your bond will rise.

Yield-to-maturity is another very important concept. This is simply the total annualized rate of return you could expect if you were to purchase a bond today and hold it until maturity. In the example above, the outstanding 8-percent coupon bond would rise in price until its yield-to-maturity reflected the six percent yield available on comparable new issues of the same maturity.

Yield-to-maturity is a function of the bond’s current price, its promised coupon payments, its par value at maturity, and the time remaining until maturity. The yield-to-maturity assumes that all coupon payments are reinvested at the bond’s yield-to-maturity.

Investors should also be familiar with the notion of *duration*, which provides a measure of the effect of yield changes on prices and rates of return for different bonds. Maturity is an inadequate measure of the economic life of a bond because it only considers the return of principal at the maturity date. Two 15-year bonds, one with a 6-percent coupon and one with a 12-percent coupon, have different economic lifetimes since an investor will recover his investment much earlier with the 12-percent bond. Duration provides an *effective maturity* for a bond by accounting for both the size and timing of the cash flow of a bond. The calculation of duration is beyond the scope of this article, but the most important features of duration can be summarized as follows:

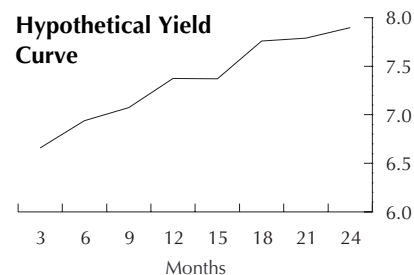
- Duration is equal to the years required to recover the purchase price of a bond, based on the present value of its future cash flows. Duration will therefore always be less than maturity for coupon paying bonds.
- Duration is superior to time to maturity when comparing the effective lives of different bonds.
- Duration is a measure of bond-price sensitivity to interest rate movements and is therefore a critical feature in assessing risk and return. Bond-price changes are positively related to duration, so an investor can increase (or decrease) the interest rate sensitivity of his bond portfolio by adding a bond with duration that is longer (or shorter) than that of his current portfolio.

Mistakes to Avoid

With these fundamental concepts in place, we can address the issue on the minds of most investors: What bond, or

bond funds, might be appropriate for your portfolio? If the primary goal is to maximize expected return while minimizing volatility, we can eliminate a number of alternatives and narrow the options considerably.

Maturity is one parameter that investors must consider when purchasing bonds. Our parent, AIER, has studied interest rates and price inflation for decades. We have come to the conclusion that extending maturities, that is, holding fixed-income investments with maturities of five years or more, simply does not pay, especially if you are concerned with both volatility and return.



The chart above is a hypothetical yield curve, which depicts the yield-to-maturity available for bonds of various maturities. We show an upward sloping yield curve because at most times long-term rates exceed short-term rates.

At first glance, based on the curve depicted here, one might expect that an investor with a long-term investment horizon would do better by favoring longer-term instruments, but this is not the situation. The major reason is volatility. Table 1 shows both the annualized returns and standard deviation (a statistical measure of volatility) attributable to government debt issues of varying maturities. Again, bondholders are locked into a fixed coupon and redemption value, so their bonds’ values are vulnerable to interest-rate fluctuations. Long-term bonds are locked in for a longer period, resulting in greater volatility. Since maximizing the risk-adjusted returns is an overarching goal of portfolio management, long-term bonds should not be considered.

Since bond prices, and therefore their returns, are inversely tied to interest rates, an investor could do quite well, for example, by selling short-term bonds and buying longer-term bonds when short-term rates were about to rise and long-term rates were about to fall. All that is needed is a reliable method of forecast-

Table 1: Average Returns on Treasury Securities

	1-month T-Bills	6-month rolling T-Bills	1-year rolling T-Bills	5-year T-Notes	Long-term T-Bonds
Annualized Total Return	6.34%	7.14%	7.26%	7.71%	7.57%
Annualized Standard Deviation	1.22%	1.66%	2.02%	6.36%	11.20%

Based on quarterly data: January 1964-December 2000. Source: DFA Advisors.

ing interest rates.

Unfortunately, there is no such method; worse yet, there are countless money managers whose livelihoods depend on convincing investors that they possess such a crystal ball. Bond mutual funds provide strong evidence that “actively managed” bond portfolios, when properly categorized, under-perform their relevant indexes. Moreover, our own clients have often come to us with bond funds that have strayed significantly from their stated objective (e.g., heavily weighting long-term bonds instead of concentrating on the short-term end of the yield curve).

Bonds: How Best to Invest

If investors should avoid long-term bonds and also money managers that claim to know the future, what avenue *should* they pursue? There are five basic alternatives available to investors who wish to pursue a “passive” strategy (they make no attempt to forecast interest rates), while concentrating on short-term securities. These include a “buy and hold”, indexing, laddering, portfolio immunization, and finally a “variable maturity” strategy.

The first option is simplest; it entails direct investment in a bond and holding it until maturity. Because an investor’s capital is not “pooled,” as in the case of a mutual fund, one can precisely target a duration appropriate to his investment horizon. This strategy is “passive” only in the sense that the investor is not buying and selling securities in anticipation of changes in the yield curve. However, he is still in a sense gambling on future interest rates; by opting to hold a given bond, he is in effect hoping that his security, over the remaining time frame, will continue to consistently provide the highest risk-adjusted returns among all other alternatives available. This approach is therefore passive in its implementation but arguably active in its strategy. Perhaps more important, most investors’ portfolios are not large enough to justify purchasing enough bonds to be adequately diversified against credit risk.

Indexing is a passive alternative that provides better diversification than a di-

rect buy-and-hold strategy, but it still comes up short for most investors. Index funds are typically of very low cost and seek to replicate the holdings, and thus the performance, of an index. Index funds therefore avoid bonds rated below BBB. In doing so they adopt a static maturity approach that typically will target an average maturity or duration that fluctuates over a very narrow range. Several bond index mutual funds are available for this purpose.

Unfortunately, indexing methodology fails to exploit opportunities that can reduce risk and boost return. These opportunities are presented by the changing nature of the yield curve. Suppose an index fund currently holds a Treasury bond with four years remaining until maturity. In order to replicate the index, the fund will continue to hold that security, *regardless of the present interest rate environment*. Even if the yield curve changes so that a less volatile one-year bond provides a higher return, the fund will not sell the four-year bond and buy the one-year bond, even though the trade would enhance the portfolio’s yield while reducing its volatility.

Laddering is another popular technique for passively investing in bonds. This technique involves buying a variety of bonds with maturities that are spread over the investor’s investment horizon. An investor with a five-year time horizon might initially invest equal amounts in bonds that mature in 1, 2, 3, 4, and 5 years. In one year, the 1-year position will have matured, and the investor will invest the proceeds in another issue with a 5-year maturity. He will simply repeat this procedure each year, thus maintaining a portfolio equally distributed across the first 5 years of the yield curve.

A laddered portfolio provides a compromise. By spreading his bets, the investor is admitting that rates are unpredictable. Short-term positions potentially provide stability since they are generally less vulnerable to interest-rate swings, but in an upward sloping yield-curve environment, they typically provide a lower yield. The longer-term positions are more interest-rate sensitive but usually offer higher

potential yields. Spreading out the maturity of the portfolio simply offers some protection against interest-rate changes. If rates fall “across the board” before the next reinvestment date, a laddered portfolio would be forced to add a bond with a lower yield, but the remainder of the portfolio would have appreciated. When rates are rising, the converse would be true.

While laddering might add protection from interest-rate risk relative to a simple buy-and-hold strategy, like indexing it also fails to take advantage of a changing yield-curve environment. A changing yield curve frequently offers the investor a chance to enhance returns with lower volatility, but a mechanical, laddered approach turns a blind eye to these opportunities.

Passive-Active Approaches

We recommend that investors consider *portfolio immunization* and *variable maturity* strategies when considering fixed-income investments. Both are relatively sophisticated approaches to fixed-income investing; they are passive in their strategy in that they make no attempt to predict interest rates, but they are active in their implementation because they can require frequent buying and selling.

Portfolio immunization is a technique that uses the principle of duration to allow an investor to protect his fixed-income investments from interest-rate risk. Interest-rate risk is comprised of two components, price risk and reinvestment risk, which work in opposite directions. If interest rates rise, an investor would see the market value of his bond fall, but he would be able to reinvest his coupon payments at a higher rate, so investment income would rise. Conversely, if interest rates fall, the bond’s price will rise, but reinvestment rates, and therefore investment income, will fall. Immunization allows an investor to quantify these offsetting effects in order to neutralize interest-rate risk through a carefully constructed portfolio.

Suppose an investor earmarks funds for a five-year investment horizon, when his child will begin college. If he purchases a bond with five-year *time until maturity* with an expected yield-to-maturity of six percent, there is no guarantee that he will realize this 6-percent yield-to-maturity, even if he holds the bond to maturity. This is because reinvestment rates in the meantime could fall below the expected yield-to-maturity.

However, if instead he purchases a bond with a *duration* equal to five years, he can neutralize this interest-rate risk. Keep in mind that the duration of a coupon-paying bond will always be less than its time to maturity, so a bond with a 5-year duration would have more than five years remaining until maturity. Therefore, if interest rates should fall throughout year five, reducing reinvestment income for that fifth year, the bond's price will have risen by the end of his investment horizon (the end of year five) since it would have time remaining until maturity. He would sell it, with the higher proceeds offsetting the reduced income. *By purchasing a bond, or a portfolio of bonds with a duration equal to his investment horizon, an investor can immunize his holdings against interest-rate risk.*

Constructing an immunized portfolio for a specific investment horizon can be overwhelming for many investors because in practice immunization, as we have described it, requires periodic rebalancing since duration should be equal to the investment horizon, which grows shorter as time passes. Most mutual funds, moreover, are inappropriate for this task because they are designed to satisfy myriad investors with numerous investment horizons.

However, we have identified the Fidelity Target Timeline 2003 fund as a means of taking advantage of this technique. The fund is unique in that it will be liquidated shortly after September 30, 2003. The fund is designed to provide investors with a total return that approximates the fund's quoted yield (within +/- 0.50 percent annually) as of the date of purchase if investors hold their investment to the fund's target date and reinvest all distributions. Investors who have time horizons that are close to these dates might find these funds particularly appealing. The fund's prospectus summarizes the approach:

(Fidelity Target Timeline) seeks to achieve a definable return by managing each fund's sensitivity to changing interest rates. In addition to affecting the value of the funds' bonds, changes in

interest rates affect the amount the funds earn from reinvesting the income from the bonds. Falling interest rates, for example, will increase the value of the funds' bonds but decrease earnings from reinvestment, while rising interest rates will increase earnings from reinvestment but decrease the value of the funds' bonds. In seeking a definable return, FMR structures each fund's portfolio so that these interest rate effects generally offset each other over the fund's lifetime. This strategy involves selecting securities whose average duration is approximately equal to the amount of time remaining to a fund's target date.

Many individual investors will find that the best way to invest in fixed-income securities is via a "variable maturity" approach, pioneered by Eugene Fama of the University of Chicago and put into practice through the fixed-income mutual funds of Dimensional Fund Advisors (DFA). Unlike laddering and indexing, the variable maturity approach seeks to take advantage of the higher expected-return, lower-risk outcomes. How-

ever, no attempt is made to predict interest rates. Instead the strategy seeks to obtain risk-adjusted returns present in the existing yield curve. It is predicated on the notion that bond markets are efficient. Current bond prices, and therefore current interest rates, reflect all publicly available information. Today's interest rates (manifested in the current yield curve), therefore provide the best estimate of future interest rates.

The variable maturity strategy begins with the current yield curve. Consider again the hypothetical yield curve above. From this yield curve, a matrix of expected returns can be generated for any bond for any combination of its 1) ma-

turity at time of purchase, and 2) maturity at time of sale. Table 2 is such a matrix. For example, a bond with 18 months remaining until maturity that is purchased today and sold in three months (when 15 months remain until maturity) would have the highest expected return available (9.73 percent) of all such possible combinations. In order to calculate these expected returns, three pieces of information are required. The first is the current bond price, which is easily ascertained in today's market. The second data point is the income generated by the bond over the three months that the bond will be held; this too is currently available. The final element is the bond's sale price three months hence. While this is unknown, the efficiency of the bond market suggests that our best estimate can be derived from today's yield curve. Specifically, the expected price/yield of current 15-month bonds is used to estimate the price/yield of 15-month bonds three months from now.

		24	21	18	15	12	9	6	3
Maturity (Months) At Time of Sale	21	8.65							
	18	8.32	7.98						
	15	8.79	8.85	9.73					
	12	8.50	8.45	8.68	7.64				
	9	8.39	8.32	8.44	7.80	7.95			
	6	8.22	8.13	8.17	7.65	7.65	7.35		
	3	8.07	7.98	7.98	7.54	7.54	7.29	7.22	
	0	7.90	7.79	7.76	7.37	7.37	7.08	6.94	6.66

Note that the optimal expected return corresponds to the steepest part of the yield curve in an upwardly sloping yield-curve environment. If the yield curve remains the same over the following three months, the investor will gain the greatest "bang for the buck" in terms of return. Recall that bond prices are inversely related to interest rates, and rates fall most sharply over this portion of the yield curve. On the other hand, if the yield curve shifts (as is most often the case), the strategy will simply sell the position and reinvest in whatever combination of maturity and holding period provides the highest expected return, based on a revised matrix of expected outcomes.

NEWLY RECOMMENDED FUNDS

	Ticker Symbol	3/15/01	Month Earlier	Year Earlier	— 52-Week — High Low		Distributions Latest 12 Months Income	Latest 12 Months Capital Gains	Yield (%)
iShares Index Funds:									
	S&P SmallCap 600/BARRA Value	IJS	76.65	83.50	na	85.60 66.63	0.0935	1.1231	0.49
	S&P 500/BARRA Value	IVE	59.90	64.26	na	67.00 58.25	0.1837	0.1472	1.23
	S&P 500/BARRA Growth	IVW	57.25	66.40	na	94.25 57.25	0.0668	0.1124	0.47
	S&P Europe 350	IEV	65.00	71.99	na	80.75 65.00	0.0092	0.0000	0.06
	Vanguard Value Index	VIVAX	21.63	23.39	22.79	23.89 20.05	0.0980	0.5700	1.81
	Vanguard Sm. Cap. Value Index	VSIX	9.72	10.70	na	10.70 8.40	0.0950	0.2500	0.98

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 if 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 onto the list of the highest-yielding issues in the Average, it will be because its price is depressed — it is out of favor with the investing public for one reason or another (disappointing earnings, unfavorable news developments, etc.). 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 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, it was found that the best combination of total return and risk (volatility) was obtained by purchasing the four 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 of the four 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, es-

pecially when it has ranked fourth or higher on the list. We have chosen to exclude Philip Morris also, because, in present circumstances, it seems unlikely that there will be sufficient "good news" for it to be sold out of the portfolio, whatever its ups and downs, unless it is specifically excluded. To repeat, the HYD strategy derives much of its superior performance from "buying cheap and selling dear" and inclusion of Philip Morris in the strategy at this time would seem to render it a "buy-and-hold." For nearly eight years, Philip Morris has never ranked lower than fourth on the list.

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 the full list of 30 Dow stocks) are based on mid-month closing prices, plus or minus \$0.125 per

share. This month, the strategy again calls for reduced holdings of Minnesota Mining, J.P. Morgan Chase, and Chevron (no longer in the Dow), to buy Caterpillar, Dupont, and International Paper. 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 below only when commissions are less than one percent 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 to buy all the indicated positions at once or to spread purchases out over 18 months. Either choice could be said to represent an attempt at "market timing," *i.e.*, "all at once" could

As of March 15, 2001

	Rank	Yield	Price	Status	—Percent of Portfolio*—	
					Value	No. Shares##
Philip Morris	1	4.49%	\$47.26	*	-0-	-0-
Eastman Kodak	2	4.07%	43.21	Holding*	17.2	16.9
General Motors	3	3.66%	54.60	*	-0-	-0-
Dupont	4	3.26%	43.00	Buying	13.4	13.3
Caterpillar	5	3.02%	45.00	Buying	25.4	24.0
Int'l Paper	6	2.86%	34.92	Buying	10.4	12.7
JP Morgan Chase	7	2.83%	45.26	Selling	17.3	16.3
SBC Comm.	8	2.36%	42.82	Holding	1.3	1.3
Minn.Mng.& Mfg.	9	2.20%	109.24	Holding	6.3	2.4
A.T.&T.	25	0.64%	23.35	Holding	5.3	9.6
Chevron	-	2.93%	88.70	Selling	1.2	0.6
Goodyear Tire	-	4.85%	24.73	Holding	0.6	1.1
Sears, Roebuck	-	2.48%	37.05	Selling	1.6	1.8
					100.0	100.0

Change in Portfolio Value‡

						From	Std.
	1 mo.	1 yr.	5 yrs.	10 yrs.	15 yrs.	12/63	Dev.
Strategy	-3.5%	19.3%	17.6%	19.2%	19.0%	16.6%	19.0
Dow	-7.7%	1.9%	14.0%	15.3%	15.1%	11.0%	16.9

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

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

be construed as a prediction that the prices of the shares will go up after the purchases are made—and will look good in retrospect only if they do. 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 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 from, or sustain a greater loss than, the strategy. On the other hand, if they are purchased and the strategy does not call for selling them, it

will usually be because their prices have decreased so that their indicated yields render them again eligible for purchase. In short, buying stocks that are not currently among the top four means either that they will be quickly sold (perhaps at a gain, perhaps not, but with payment of two commissions either way), or, that they will be held in the portfolio at a loss for some period of time. In the latter situation, the investor would have been better off to have waited.

Accordingly, for new HYD clients, we usually purchase the full complement of the currently eligible stocks immediately. (This month, the four eligible issues—Caterpillar, DuPont, Kodak, and International Paper—account for about two-thirds 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.

AT&T is something of a special situation here. The current holdings in the strategy were acquired last fall, before the company slashed its dividend. The company's problems (see the December *INVESTMENT GUIDE*) continue to be reflected in its stock price. Yet, when the time comes to sell the strategy's holdings, in the spring of 2002, it is quite possible that the shares (including prospective spin-offs) will be worth more than they are now. We have been buying AT&T for new clients, but because it is not now eligible for purchase, a case could be made that it should be left out of an initial commitment at this time.

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 discretionary portfolio management programs are comparable to those of most mutual funds. Contact us for information on this and our other discretionary investment management services.

THE DOW JONES INDUSTRIALS RANKED BY YIELD

	Ticker Symbol	Market Prices			12-Month		Latest Dividend Record			Indicated		
		3/15/01	2/15/01	3/15/00	High	Low	Amount	Date	Paid	Annual Dividend	Yield†	
	Philip Morris	MO	\$47.26	45.99	20.13	52.04 H	19.00	0.530	3/15/01	4/10/01	2.120	4.49
★	Eastman Kodak	EK	\$43.21	44.85	55.13	65.69	35.31	0.440	3/01/01	4/02/01	1.760	4.07
‡	General Motors	GM	\$54.60	55.24	78.81	94.63	48.44	0.500	2/16/01	3/10/01	2.000	3.66
★	DuPont	DD	\$43.00	43.95	50.63	63.63	38.19	0.350	2/15/01	3/14/01	1.400	3.26
★	Caterpillar	CAT	\$45.00	44.12	38.25	49.63	29.00	0.340	1/22/01	2/20/01	1.360	3.02
★	International Paper	IP	\$34.92	37.90	36.63	45.94	26.31	0.250	2/23/01	3/15/01	1.000	2.86
☆	J. P. Morgan Chase	JPM	\$45.26	51.11	31.75	67.17	32.38	0.340	4/06/01	4/30/01	1.360	2.83
☆	SBC Comm.	SBC	\$42.82	47.00	42.50	59.00	38.44	0.254	1/10/01	2/01/01	1.010	2.36
☆	Minn. Min. & Mfg.	MMM	\$109.24	114.75	82.50	122.94	78.19	0.600	2/23/01	3/12/01	2.400	2.20
	Procter & Gamble	PG	\$64.94	73.86	58.50	79.31	53.25	0.350	1/19/01	2/15/01	1.400	2.16
‡	Exxon Mobil	XOM	\$82.95	82.50	77.75	95.44	74.31	0.440	2/09/01	3/09/01	1.760	2.12
	Honeywell Intl.	HON	\$40.51	48.50	45.94	59.13	32.13	0.188	2/20/01	3/09/01	0.750	1.85
	Merck	MRK	\$74.05	78.10	59.81	96.69	56.06	0.340	3/09/01	4/02/01	1.360	1.84
	Alcoa (s)	AA	\$35.77	36.38	32.03	39.58 H	23.13	0.150	5/04/01	5/25/01	0.600	1.68
	General Electric (s)	GE	\$41.08	47.98	44.52	60.50	38.64 L	0.160	3/07/01	4/25/01	0.640	1.56
	Coca-Cola	KO	\$47.65	58.37	47.56	64.00	43.50	0.180	3/15/01	4/01/01	0.720	1.51
	Johnson & Johnson	JNJ	\$93.35	94.20	76.94	105.94	68.63	0.320	2/20/01	3/13/01	1.280	1.37
	Boeing	BA	\$56.10	60.15	34.88	70.94	32.88	0.170	2/09/01	3/02/01	0.680	1.21
	Citigroup (s)	C	\$46.40	54.07	52.25	59.13	36.66	0.140	2/05/01	2/23/01	0.560	1.21
	United Tech.	UTX	\$75.75	79.00	53.88	82.50 H	49.38	0.225	2/16/01	3/10/01	0.900	1.19
	Hewlett-Packard (s)	HWP	\$30.70	36.35	66.00	68.09	27.60 L	0.080	3/21/01	4/11/01	0.320	1.04
	McDonald's	MCD	\$27.24	30.08	32.50	39.94	26.29 L	0.215	11/15/00	12/01/00	0.220	0.81
	American Express (s)	AXP	\$39.80	46.86	44.29	63.00	38.00 L	0.080	1/05/01	2/09/01	0.320	0.80
	Walt Disney	DIS	\$28.00	32.41	34.81	43.88	26.00	0.210	12/08/00	12/22/00	0.210	0.75
☆	AT&T	T	\$23.35	22.14	51.00	61.00	16.50	0.038	3/30/01	5/01/01	0.150	0.64
	Wal-Mart Stores	WMT	\$47.85	52.00	51.50	64.94	41.44	0.070	3/23/01	4/09/01	0.280	0.59
	IBM	IBM	\$95.56	116.78	107.00	134.94	80.06	0.130	2/09/01	3/10/01	0.520	0.54
	Home Depot, Inc.	HD	\$43.20	44.61	57.00	70.00	34.69	0.040	3/08/01	3/22/01	0.160	0.37
	Intel Corp. (s)	INTC	\$28.50	35.81	60.10	75.81	27.06 L	0.020	2/07/01	3/01/01	0.080	0.28
	Microsoft Corp.	MSFT	\$53.69	58.81	95.38	115.00	40.25	0.000	-	-	0.000	0.00
☆	Chevron	CHV	\$88.70	85.40	83.94	94.88	76.88	0.650	2/16/01	3/12/01	2.600	2.93
☆	Goodyear	GT	\$24.73	25.24	21.94	31.63	15.60	0.300	2/15/01	3/15/01	1.200	4.85
☆	Sears, Roebuck	S	\$37.05	39.03	29.06	43.50	27.75	0.230	3/02/01	4/02/01	0.920	2.48

★ Buy. ☆ Hold. † Based on indicated dividends and market price as of 3/15/01. H New 52-week high. L New 52-week low. (s) All data adjusted for splits. • Excludes extras. ‡ These issues had been recommended for purchase under our original HYD stock selection strategy because they had ranked among the 10 highest yielding issues for more than 12 months. They should be retained by readers who currently hold them.

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

	3/15/01	Mo. Earlier	Yr. Earlier
Gold, London p.m. fixing	262.05	258.55	289.15
Silver, London Spot Price	4.42	4.52	5.08
Copper, COMEX Spot Price	0.80	0.83	0.80
Crude Oil, W. Texas Int. Spot	26.55	28.80	30.73
Dow Jones Spot Index	109.02	109.65	121.04
Dow Jones-AIG Futures Index	107.49	110.93	100.07
CRB-Bridge Futures Index	215.76	222.44	216.31

Interest Rates (%)

U.S. Treasury bills - 91 day	4.50	5.05	5.84
182 day	4.40	5.03	6.10
52 week	4.18	4.89	6.19
U.S. Treasury bonds - 15 year	5.28	5.61	6.43
Corporates:			
High Quality - 10+ year	6.82	7.11	7.78
Medium Quality - 10+ year	7.61	7.83	8.11
Federal Reserve Discount Rate	5.00	5.00	5.25
New York Prime Rate	8.50	8.50	8.75
Euro Rates			
3 month	4.70	4.65	3.67
Government bonds - 10 year	4.69	4.69	5.37
Swiss Rates - 3 month	3.45	3.49	2.38
Government bonds - 10 year	3.35	3.33	na

Exchange Rates

British Pound	\$1.431600	1.450300	1.570900
Canadian Dollar	\$0.638300	0.651600	0.681300
Euro	\$0.895000	0.910800	0.966500
Japanese Yen	\$0.008136	0.008689	0.009494
South African Rand	\$0.126600	0.126400	0.154700
Swiss Franc	\$0.582300	0.592900	0.600000

Securities Markets

	3/15/01	Mo. Earlier	Yr. Earlier
S & P 500 Stock Composite	1,173.56	1,326.61	1,392.15
Dow Jones Industrial Average	10,031.28	10,891.02	10,131.41
Dow Jones Transportation Average	2,703.01	3,042.47	2,521.71
Dow Jones Utilities Average	375.50	386.02	284.02
Dow Jones Bond Average	101.49	100.97	94.65
Nasdaq Composite	1,940.71	2,552.91	4,582.62
Financial Times Gold Mines Index	694.88	626.63	844.47
FT African Gold Mines	797.16	709.15	1,110.19
FT Australasian Gold Mines	740.83	746.36	819.73
FT North American Gold Mines	652.55	580.00	755.01

Coin Prices

	3/15/01	Mo. Earlier	Yr. Earlier	Premium
American Eagle (1.00)	\$269.65	272.35	296.35	2.90
Austrian 100-Corona (0.9803)	\$257.03	259.63	281.63	0.05
British Sovereign (0.2354)	\$65.35	65.95	71.35	5.94
Canadian Maple Leaf (1.00)	\$269.90	272.60	295.80	3.00
Mexican 50-Peso (1.2057)	\$317.30	320.50	347.60	0.43
Mexican Ounce (1.00)	\$263.00	265.70	288.10	0.36
S. African Krugerrand (1.00)	\$267.75	270.45	293.15	2.18
U.S. Double Eagle-\$20 (0.9675)				
St. Gaudens (MS-60)	\$342.50	342.50	395.00	35.09
Liberty (Type I-AU)	\$675.00	675.00	675.00	166.24
Liberty (Type II-AU)	\$425.00	425.00	435.00	67.63
Liberty (Type III-AU)	\$312.50	312.50	360.00	23.26
U.S. Silver Coins (\$1,000 face value)				
90% Silver (715 oz.)	\$4,100.00	4,100.00	4,250.00	29.73
40% Silver (292 oz.)	\$1,550.00	1,550.00	1,610.00	20.10
Silver Dollars	\$5,700.00	5,700.00	6,625.00	66.70

Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at \$262.05 per ounce and silver at \$4.42 per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

Selected Mutual Funds

	Ticker Symbol	3/15/01	Month Earlier	Year Earlier	— 52-Week — High Low	Distributions Latest 12 Months Income	Capital Gains	Yield (%)
★ Duff & Phelps Utilities Income ¹	DNP	\$10.66	10.71	8.81	10.98 8.63	0.7800	0.0000	7.32
★ T Rowe Price European Stock	PRESX	\$17.72	19.41	23.91	25.03 18.38	0.1600	1.4200	0.90
★ Vanguard European Stk Index	VEURX	\$22.64	24.62	28.34	29.85 23.45	0.4230	0.0500	1.87
★ Vanguard REIT Index	VGSI	\$11.41	11.41	9.74	11.98 9.62	0.8200	0.0000	7.19
★ Vanguard Growth Index	VIGRX	\$25.48	30.23	38.15	42.38 26.83	0.1250	0.0000	0.49
★ Fidelity Target Timeline 2003	FTARX	\$9.44	9.32	9.05	9.42 8.88	0.6462	0.0000	6.85
★ USAA Short Term Bond	USSBX	\$9.83	9.73	9.69	9.80 9.53	0.6520	0.0003	6.63
★ Vanguard Short Term Corp	VFSTX	\$10.82	10.69	10.51	10.79 10.33	0.7121	0.0000	6.58

North American and Diversified Mining Companies

	Ticker Symbol	3/15/01	Month Earlier	Year Earlier	— 52-Week — High Low	Indicated Annual Net Dividends	Payment Schedule	Yield (%)
Agnico-Eagle†	AEM	\$6.97	5.25	6.06	7.99 4.88	0.020	Annual	0.29
★ Barrick Gold Corp.†	ABX	\$15.36	13.92	16.69	20.00 12.31	0.220	Semiannual	1.43
Freeport-McMoran C&G, Cl.A	FCXA	\$11.55	11.74	11.88	13.20 6.75	0.000	-	0.00
★ Homestake Mining	HM	\$5.58	4.73	6.38	7.63 3.50	0.050	Semiannual	0.90
★ Newmont Mining	NEM	\$16.71	14.13	23.88	28.38 12.75	0.120	Quarterly	0.72
★ Placer Dome†	PDG	\$9.38	8.00	8.75	10.81 7.25	0.100	Semiannual	1.07
★ Rio Tinto PLC‡	RTP	\$69.95	73.85	65.19	79.50 55.13	2.300	Semiannual	3.29

South African Mining Companies, Finance Houses and Investment Trusts

	Ticker Symbol	3/15/01	Month Earlier	Year Earlier	— 52-Week — High Low	ADR Net Dividends • and Ex-Dividend Dates	Yield (%)
ASA Ltd.	ASA	\$17.80	17.18	18.19	20.50 14.06	- - 0.600°	3.37
Anglo American PLC ²	AAUK	\$61.25	65.56	43.25	68.88 36.75	9/20/00 0.580 3/21/01 1.444	3.30
★ AngloGold Ltd. ³	AU	\$15.26	13.62	25.44	26.00 12.25	8/09/00 0.511 2/21/01 0.417	6.08
Avgold Ltd.	AVGLY	\$4.75	4.05	6.57	6.66 3.11	No Dividends Declared	
De Beers Consolidated Mines	DBRSY	\$40.56	42.00	23.06	43.88 18.19	9/13/00 0.345 3/23/01 0.948	3.19
Gencor Ltd.	GNCRY	\$3.45	4.38	3.79	4.47 2.27	9/13/00 0.164 3/07/01 0.470	18.38
★ Gold Fields Ltd. ⁴	GOLD	\$3.88	3.31	4.53	5.06 2.56	9/15/99 0.045 2/16/00 0.026	1.82

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

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