MORGAN STANLEY INVESTMENT RESEARCH

INVESTMENT STRATEGY

October 24, 1984

"HOW'M I DOIN'?"

Like New York's Mayor Ed Koch, portfolio managers are eager to get feedback on their performance. However, all too often they only know what returns they achieved and not how those were attained. Perhaps this is only natural, since there are few standards for performance attribution. To the extent that such analysis has been attempted, it has mostly concentrated on traditional breakdowns of the relative contributions of various market sectors or industry groups. Still, a little more digging beneath the surface can yield a treasure of information about the behavior of the stock market and the returns it provides.

TWO INVESTMENT STYLES

The best starting point is, paradoxically, not the market itself but investor styles. Specifically, we will focus on the two major approaches to investing: "momentum" and "value." An examination of these two concepts gives a broad picture of the key investment issues of today.

First, much has been said and written about the so-called value approach. This is a general term that covers investment decision making based on dividend discount models, per share book value to stock price ratios, P/E multiple to profit growth rate comparisons, and similar concepts. Among the more notable practitioners of the value school are Warren Buffet, John Templeton, the Sequoia Fund, the Pioneer Fund, and, in general, investors who think of themselves as "contrarians." Figure 1 illustrates the returns that might have been achieved under this methodology over the past 10 years relative to those of the S&P 500. Specifically, it shows the linked monthly performance of the 100 most attractively valued stocks, as identified by the Morgan Stanley dividend discount model, among the 500 issues with the largest market capitalizations. "Value" was determined by calculating the present value of the stream of expected dividends, discounted by the interest rate for long-term Treasury bonds. When viewed from a 10-year perspective, this approach would have been a very successful one. However, as the chart shows, there were some periods in which a value-oriented investment strategy would have resulted in below-market performance.

The second major style focuses on momentum. The subsets of this school include models that select stocks based on the rate of change in earnings, the rate of change in the stock price, or various combinations of the two. Among the practitioners of some form of momentum investing are William O'Neil, the Value Line fund, and most growth mutual funds. Jack Brush's Columbine Capital has one of the best price momentum

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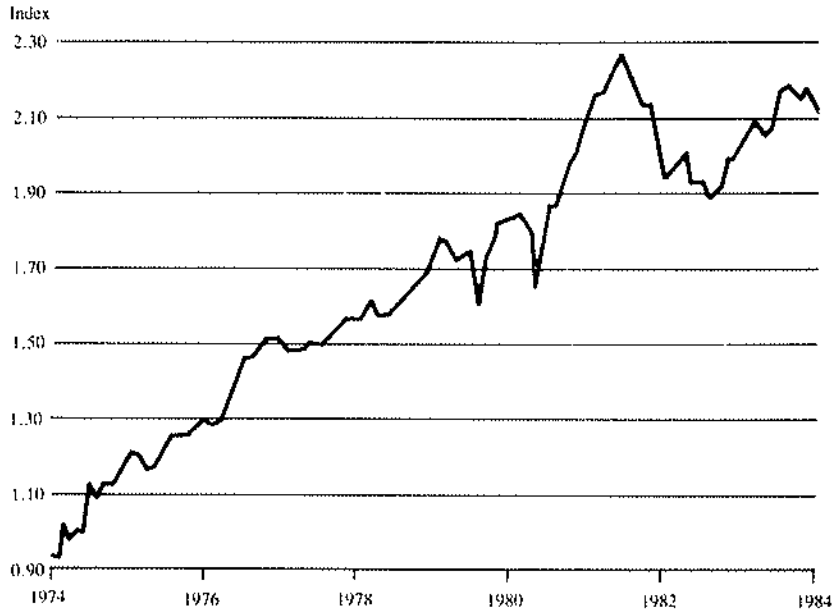
Figure 1

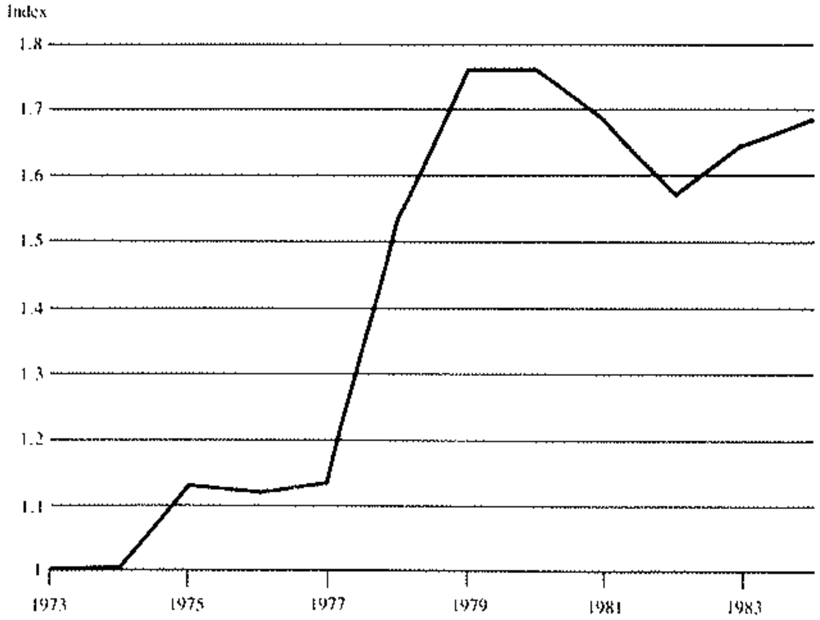
Performance of 100 Highest Value Stocks
Relative to That of the S&P 500
(July 1974 = 1.00)



Sources: Morgan Stanley Asset Management; Ford Investor Services

Figure 2

Performance of Stocks Exhibiting Best Price Momentum
Relative to That of the S&P 500
(July 1974 = 1.00)



Source: Columbine Capital

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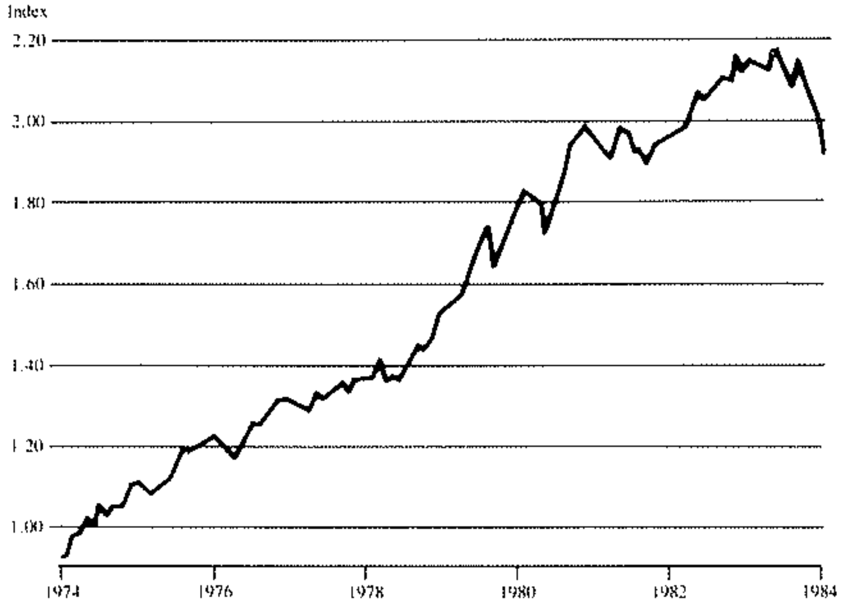
models. Figure 2 plots the performance of the stocks Columbine rates highest on that basis vis-a-vis that of the market. As the chart demonstrates, this relative strength approach would also have resulted in a record of superior returns over the last decade.

Using a different type of momentum, Figure 3 shows the 10-year results of a Morgan Stanley model that plots the performance of the stocks of the 100 companies with the highest earnings momentum in the 500-firm large-capitalization universe each month relative to that of the S&P 500. As in the case of value investing, the profit momentum approach would have outdistanced the market -- and by about the same degree. Again, however, there were intervals when the momentum style would have produced returns below those of the popular averages.

Figure 3

Performance of Stocks of Companies with Strongest
Earnings Momentum Relative to That of S&P 500
(July 1974 = 1.00)

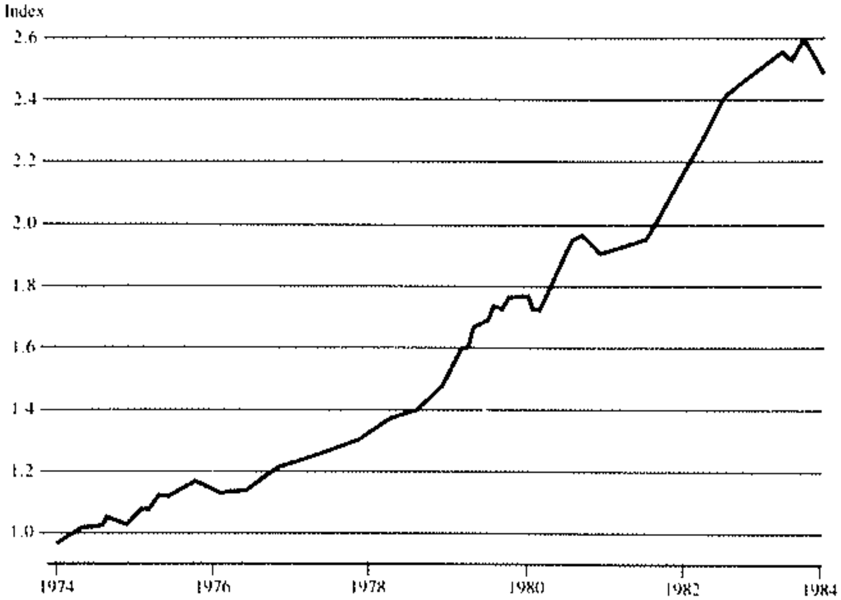


Sources: Morgan Stanley Asset Management; Ford Investor Services

In fact, in the last year or so, there have been some highly unusual momentum trends. As Figure 4 illustrates, last year the equities of companies with the weakest earnings momentum outperformed those of firms with the best. Also, Ed Nicoski of Piper Jaffray reported that in the first quarter of 1984, stocks in the industry groups with the strongest profit comparisons declined 8.3%, on average, while those in segments with the weakest dipped only 2%. This occurred in a market in which the S&P 500 was off 3.3%.

Figure 4

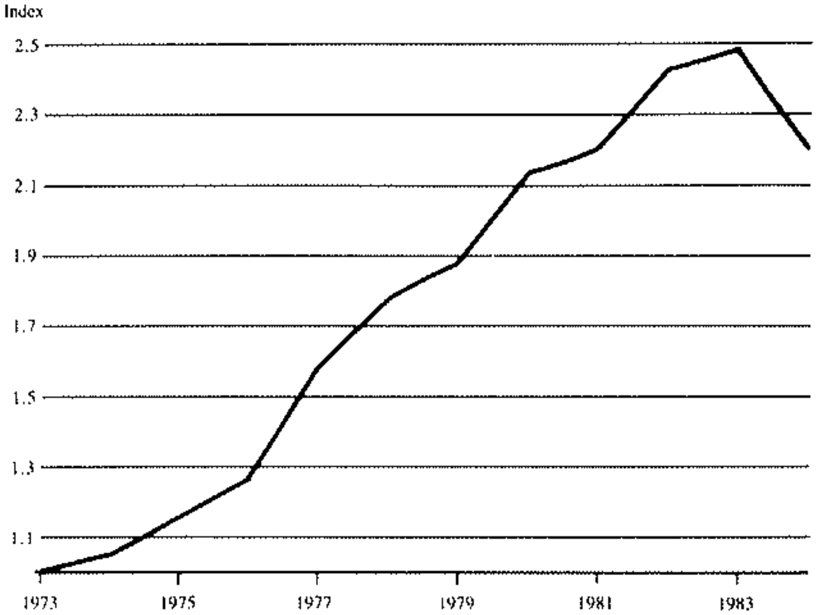
Performance of Stocks of Companies with Strongest Earnings Momentum Relative to That of Shares of Firms with Weakest Profit Momentum (July 1974 = 1.00)



Sources: Morgan Stanley Asset Management; Ford Investor Services

Figure 5

Performance of Value Line Top-Rated Stocks Relative to That of S&P 500 (Logarithmic Scale)

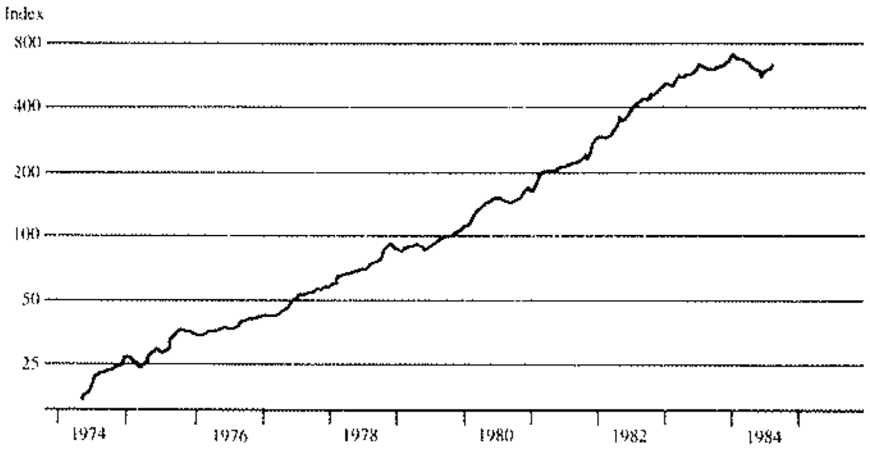


Source: Value Line Survey

Figure 5 shows the performance of another model, the highest-ranked Value Line stocks, which generally represent those exhibiting a combination of high earnings and price momentum, vis-a-vis that of the composite. Again, the long-term record is superior. However, as shown in Figure 6, from about mid-1983 to early 1984, the lowest-rated Value Line equities outperformed those in the top tier for almost a year.

Figure 6

Performance of Value Line Top-Rated Stocks
Relative to That of Lowest-Rated Equities
(Logarithmic Scale)



Source: Value Line Survey

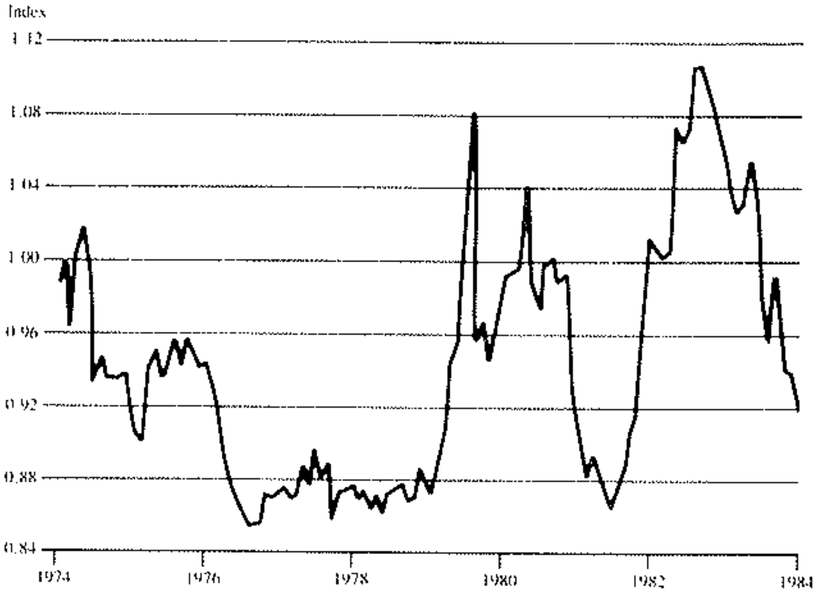
MUTUALLY EXCLUSIVE?

Such a period of contra-trend performance raises a key issue. Both logic and empirical findings support the thesis that good-value stocks are only infrequently good-momentum stocks as well. In an intensively analyzed universe, issues that appear on the good-value list are rarely those of companies that have a positive, undiscovered "story." Rather, most good-value names are in that category because either poor earnings or poor stock market performance has left them unloved and underowned. That is, most good-value equities are fallen angels -- former good-momentum stocks. This can be seen more readily by considering the opposite case: typically, fully valued issues are those that have already exhibited good earnings and/or price momentum, pushing them out of the good-value range. Actually, on average, fewer than 3% of the universe of the 500 highest market capitalization stocks concurrently qualified for both the high-value and the high-momentum groups used to develop Figures 1 and 3 over the 10-year interval studied.

While the results that could have been achieved using momentum and value styles show the importance of staying with a discipline over the long run, it is also helpful to know more about those (admittedly infrequent) periods when one's approach is not working. As noted earlier, good-momentum stocks are typically not good-value stocks. This also suggests that when one style of investing is achieving superior returns, the other is doing poorly.

Figure 7

Performance of Shares of Firms with Strongest Earnings Momentum
Relative to That of Highest Value Stocks
(July 1974 = 1.00)



Sources: Morgan Stanley Asset Management, Ford Investor Services

Actually, the process is more complex. Figures 1 and 3 show that the best value stocks often underperform the market at the same time that the issues with the best momentum also lag. However, the degree to which one approach outpaces the market varies considerably in different periods. To focus on this process, we devised Figure 7, which compares the relative performance of the best-momentum stocks and the relative performance of the best-value stocks. (That is, it superimposes Figure 1 on Figure 3.) Here, clearly, is a picture of the ebb and flow of two competing styles. As the line rises, it "favors" momentum investing; as it falls, value investing. Except in the 1977-1978 interval, the chart shows that one of the two approaches was the ruling one for a distinct period.

MOMENTUM/VALUE TRADE-OFF

What is the nature of the momentum/value trade-off? What are the clues that can help an investor determine which approach is or about to become dominant? First, the essence of momentum investing is conviction that the trends that are in place will continue into the future. Investors' time horizons seem to lengthen when momentum investing produces its best relative performance. Value investing, on the other hand, seems to work best as time horizons shorten. Emphasis in such periods is on "up-front" returns: high yields, high book value-to-stock price ratios, realizable assets, etc. There are some obvious similarities between the factors that equity investors analyze and those that participants in fixed-income markets consider. In fact, the momentum/ value curve tends to rise and fall with bond prices.

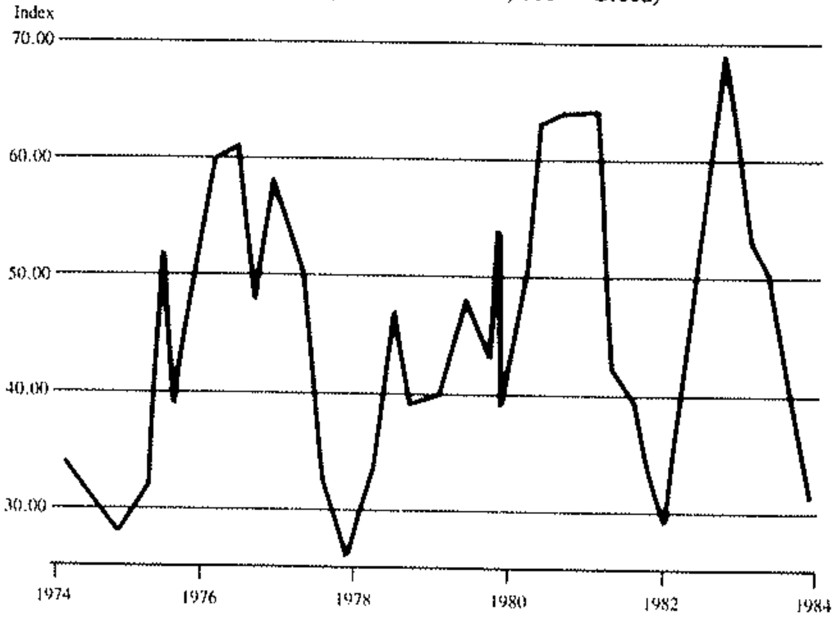
Taking a somewhat different tack, accountants are also familiar with the differences between momentum and value concepts. From the momentum perspective, they look at a corporation as an ongoing business, preparing financial statements on an entrepreneurial basis. In the value mode, in their stewardship role, they analyze the accounts on a liquidating basis.

Stock market technicians may also comprehend the distinction between momentum and value investing -- in their terminology, the difference between a "trending" and a "trading" market. In a trending (momentum) market, technicians favor stocks that show positive relative strength or exhibit "break-out" characteristics -- i.e., reaching new high ground. In contrast, in a trading market, technicians are leery of following strength in fear of being whipsawed. In those markets, stocks that break out often turn around immediately and trade lower as a result of having been "overbought." Such "false" break-outs are very common in trading markets. By the same token, issues that seem to break down in trading markets are often oversold and therefore attractive. Depending on the circumstances, technicians would use the following rules: in a trending market, buy strength, break-outs, and the new high list; in a trading market, buy weakness, break-downs, and the new low list. Judging by its performance, the market clearly seems to have been in a trading mode since mid-1983.

Technicians have some tools that enable them to recognize the type of environment that prevails. (Remember, momentum investing is most successful when time horizons are lengthening, entrepreneurial accounting is more than acceptable, and, in general, investors are more willing to accept risk; conversely, value investing works best when investors are cautious and demand full stewardship accounting.) By using "sentiment" indicators, one can view these two separate market phases as being at the opposite ends of the full spectrum of investor emotions: greed at the momentum end; fear, at the value end. For the last 16 years, one of Wall Street's most thoughtful observers, Lee Idleman, has tried to keep track of these mood swings with a "Greed Index." The index, an amalgam of 10 separate variables relating to portfolio cash levels, new research idea flows, new Wall Street products, and the like, is plotted in Figure 8. Its highs and lows occasionally precede changes in the momentum/value curve.

Figure 8

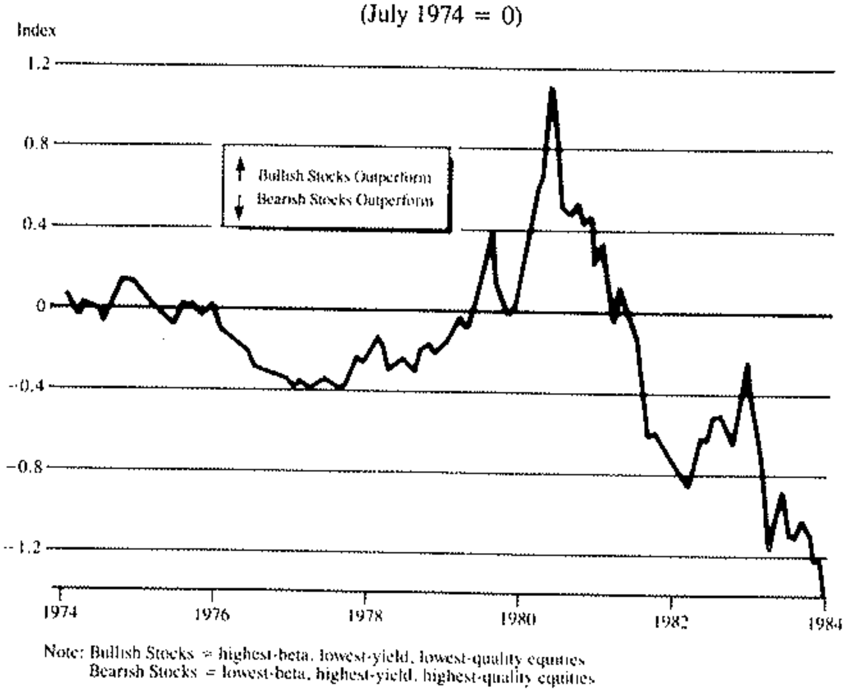
Greed Index
(Smoothed; Index: 0 = Fear; 100 = Greed)



Source: Lee Idleman

Figure 9

Performance of Bullish Stocks Versus
That of Bearish Stocks
(July 1974 = 0)



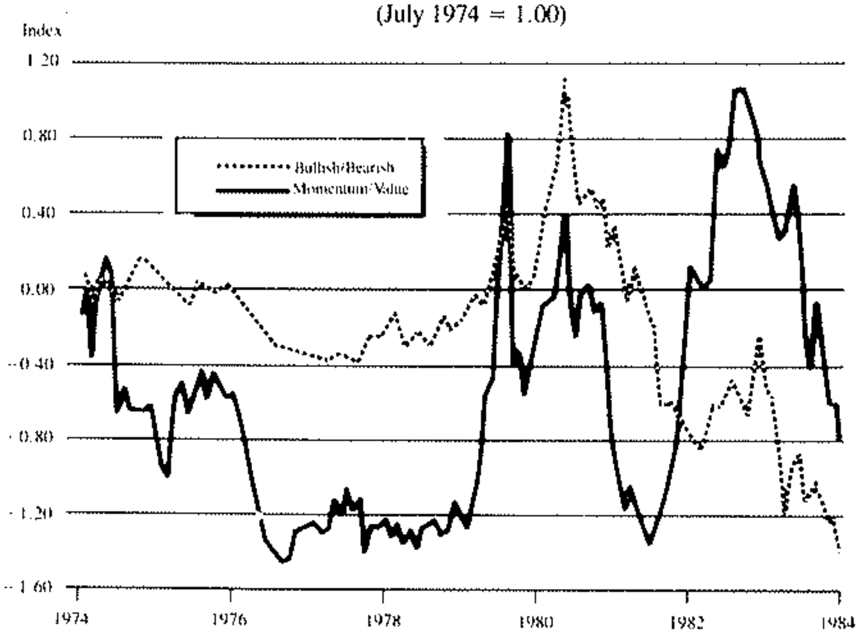
Note: Bullish Stocks = highest-beta, lowest-yield, lowest-quality equities
Bearish Stocks = lowest-beta, highest-yield, highest-quality equities

Sources: Morgan Stanley Asset Management; Ford Investor Services

Investor mood swings can also be captured by more fundamentally oriented procedures. Figure 9 presents the relative performance of the "bulls" and "bears" over the past 10 years. The data are based on two portfolios: the bull one is made up of the stocks in our 500-company large-capitalization universe that had the highest betas (i.e., market risk), lowest yields, and lowest quality ratings at the beginning of each month; the bearish one contains the opposite: issues with the lowest betas, highest yields, and highest quality ratings. The chart shows the returns of one portfolio vis-a-vis those of the other. As the line rises, the bullish stocks outperform the bearish stocks and vice versa.

Figure 10

Relative Performance
Stocks with Strongest Earnings Momentum Versus Highest Value Equities
Bullish Issues Versus Bearish Issues
(July 1974 = 1.00)



Sources: Morgan Stanley Asset Management; Ford Investor Services

The relative performance of these two portfolios shows some very important patterns. First, it moves in a coincident and consistent manner with the momentum/value curve (see Figure 10), giving additional support to the thesis presented earlier that there is an ebb and flow in the investment success that can be achieved under each of the two major approaches.

Second, the bull/bear curve also provides some key information regarding risk. Almost all of the quantitative models of stock values are currently warning that there is little reason to take added portfolio risk. (In the parlance of modern portfolio theory, the slope of the

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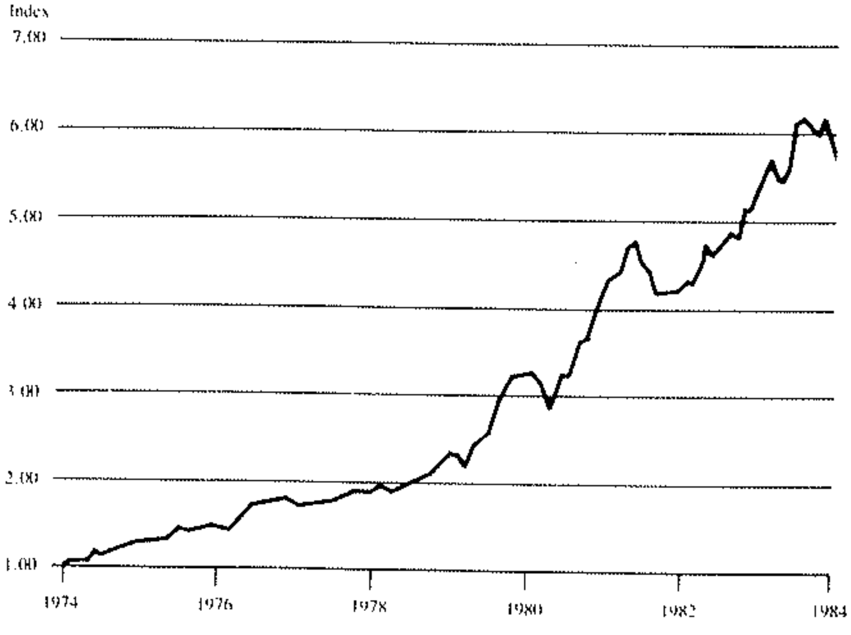
security market line is flat, if not down.) The static nature of that type of model can be contrasted to the bull/bear relationship, which is a dynamic reflection of risk preferences. This curve shows that risk-oriented investors have already been punished and severely so. It is interesting to note that bullishness reached its peak in the last 10 years in late 1980. Since then, bulls have had precious little to celebrate: while the market averages rose to new highs, bulls have not been compensated nearly enough for their riskier posture. In this light, the steep rally from mid-1982 to early 1983 appears to be a brief, feeble move, particularly in view of the severe correction that followed. In addition, there are many who contend that inflation peaked in late 1980 and that financial assets are therefore preferable to real assets. While this has been the case, the action of the bull/bear curve suggests that investor attitudes continue to be in transition and that the full beneficial effect of secular disinflation actually still lies ahead. By this reasoning, risk postures should therefore be racheted upward at some point in the intermediate future, contrary to what the static valuation models seem to be saying.

Figure 11

Performance of a Momentum/Value Optimizing Portfolio
(July 1974 = 1.00)



Sources: Morgan Stanley Asset Management, Ford Investor Services

Perhaps this bullish phase will not begin until investors finally and fully accept the disinflation case. As both Peter Bernstein and Barton Biggs have shown in their discussions of "real" (i.e., inflation-adjusted) interest rates, markets have "long memories." This transition notion is not new; a similar period occurred in the past as the economy moved from a high inflation zone to a period of stable prices. In the

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Finally, there is some evidence that there are links between the momentum/value relationship and a number of leading economic indicators: e.g., the rate of change of production of durable goods and the relative acceleration in the leading index itself. There is also reason to believe that the performance of new financial instruments such as financial futures, options on market indexes, "insured" portfolios, and the like will give further insight into the general momentum/value trade-off. Such data could even provide some signal as to turning points when a shift in style may prove rewarding. In particular, an analysis of the term structure of investor expectations as embedded in the prices of futures contracts could prove very enlightening.

Regardless of what method is used to forecast these changes in the appropriateness of a particular investment style, there is little doubt that such knowledge would be powerful. Figure 11 shows the results that might have been achieved through switching from a momentum to a value approach and vice versa at various times over the last 10 years. The specific inflection points were identified through a proprietary model that used some technical tools to monitor trading patterns. It did not, however, incorporate any benefit from hindsight on actual developments. Whereas each of the two major styles, if followed consistently, would have outperformed the market by a factor of two to one over the period studied, the combination of approaches, with shifts dictated by our simple model, would have produced returns six times greater than those of the popular averages.

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