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First Quarter 2000 Quantitative Review
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Irrational Exuberance in the U.S. Equity Market

The Rise and Fall (and Rise and Fall and Rise and Fall . . .) of Puma Technology

Much to the surprise of at least a few, the world didn't come to an end with the beginning of the new millennium. In fact, the world looked very much like the same place it was in late 1999. In the first quarter, the U.S. equity market continued down the path it had been going. Technology stocks completely dominated all other sectors of the market, with euphoria spreading to smaller, more speculative issues and reaching levels probably never seen before. An old friend of mine, for example, had been fortunate 5 years ago in acquiring 140,000 shares of Puma Technology at 25¢ a share in a venture start-up. As it came public he gave the stock in trust to his seven children – a generous gift that was worth $200,000 in July, an improbable $6.2 million in early March this year at $41 per share (great generosity indeed!), and an even more improbable $102 per share in mid March. Today, 4 weeks later, it trades down 80% at $20¼ per share. In case one is tempted to believe that this reflects considered re-evaluation of great fundamental changes, consider the facts of terrible Tuesday, March 4th. In the last 3 hours the stock rallied with the rest of NASDAQ, in this case by almost 70%, to close down less than 1% for the day, having fallen over 40% in the morning on no news! At its peak worth $14 billion on $24 million in sales, the stock represents the epitome of the greatest speculative market in U.S. history. It is hard for serious people to believe that price can be so independent of underlying reality, but it was not hard for John Maynard Keynes. The most influential economist of the 20th century was a sophisticated and experienced investor, and he understood the nature of bubbles and psychology in investing. He wrote in his The General Theory of Employment, Interest and Money in 1936,

> "A valuation, which is established as the outcome of the mass psychology of a large number of ignorant individuals is liable to change violently as the result of a sudden fluctuation of opinion due to factors which really do not make much difference . . . since there will be no strong roots of conviction to hold it steady."

That is a perfect description of the NASDAQ and Puma in the last few months, and one of many proofs to me that Keynes was more than 65 years ahead of the academic world in understanding equities. Only the leading few now begin to approach him after the efficient market nonsense of the 1970s and 1980s still taught at MIT.

More than 60 years ago, Keynes used the (somewhat insulting) analogy of children's games, including Old Maid and Musical Chairs to describe investor behavior in the stock market. In Old Maid, the way to win is to pass along the Old Maid (or shares of Puma Technology) to the next player. You will hold it for a while even though you know it is inherently unattractive in the hopes that you can pass it off to someone else. Similarly, in Musical Chairs, you keep playing until the music stops and hope that you can scramble for a chair before someone else does.

Keynes is as critical of professional investors as he is of amateurs. Another of his analogies likens the behavior of professional investors to participants in a beauty contest in which the goal is not to choose the 6 out of 100 faces that you find the most attractive, but to find the 6 out of 100 that most closely match to what the general public finds most attractive. “We devote our intelligence to anticipating what average opinion expects the average opinion to be.”

The example of Puma, and many others like it, is the by-product of a spectacular beauty contest. No fundamental explanation can account for the changing stock price of Puma. The price fluctuations are solely attributable to the infection of casino mentality in the stock market. Keynes was remarkably prescient in his ability to describe the U.S. equity market some 60 years later. Relevant excerpts from his book, The General Theory of Employment, Interest and Money, are attached.

In the first quarter, success went to investors who best understood the beauty contest mentality of the market. With the abandonment of fundamental principles on which valuations reside, the market became a two-tier market the likes of which we have never seen before. On most measures, the valuation spread between growth and value stocks was in March at least as wide as it was in the early 1970s – on some measures, it has reached the highest levels recorded.

The Premature Death of the Value Manager

There were victims to the atmosphere of irrational exuberance. As technology stocks continued their dizzying ascent, the pressure on value managers intensified. The first quarter was brutal for investors who paid attention to things like company fundamentals, price earnings ratios, book value, dividend yields, indeed, any of the basic yardsticks that have been used historically to provide a measure of value. All an investor needed to invest profitably in the first quarter was optimism.

The first part of 2000 has been remarkable in that some of the country’s – no, the world’s – most prominent value investors threw in the towel. This illustrious group included George Vanderheiden (Fidelity), Gary Brinson (Brinson/UBS), Tony Dye (Philips and Drew) and, most recently, Julian Robertson (Tiger) who, having been significantly underweight in technology stocks finally closed his remaining hedge funds. Value managers are fast becoming a rare species.

We are fortunate in that our independence as an investment firm allows us to speak candidly about our views of the market, and to invest in strategies that we believe will best lead to profitable long-term investing for our clients. While in the short term, we may lose the beauty contest, our ability to resist the pressure to conform will ultimately accrue to the benefit of our clients.

Notable Bulls and Bears

For obvious reasons, I have spent considerable time in the last 4 years reviewing the works of the best students of the stock market. Benjamin Graham understood value investing better than any other, as excerpts from Security Analysis that we last included in our year-end letter indicated. John Maynard Keynes, on the other hand, understood momentum or beauty contest investing perfectly. Interestingly both of these men got to the heart of value and momentum, the essence of the market, in 1936.

For a more recent appraisal of current market conditions, a new book by Yale professor Robert J. Shiller entitled Irrational Exuberance provides an exceptional dissertation on the psychological impact in the U.S. equity market. Shiller provides a compelling case to reach the conclusion that the market is both extremely inefficient and significantly overvalued.

Also firmly ensconced in the bear camp is Franco Modigliani, the Nobel Prize winner. In 1982, Modigliani had the foresight to recognize that the market trading at eight times earnings was ridiculously cheap because the market was inefficient and exaggerated the importance of high inflation on stocks, which were real assets and should not in his opinion have been severely reduced in value. Visiting a Boston quantitative group last month, Modigliani made it clear that low inflation, for the same reason, should not have inflated the market's p/e to 32x, and that at this price it constitutes a 'major bubble'. Modigliani, based purely on trained economic thought, has managed to make two brave contrarian calls.

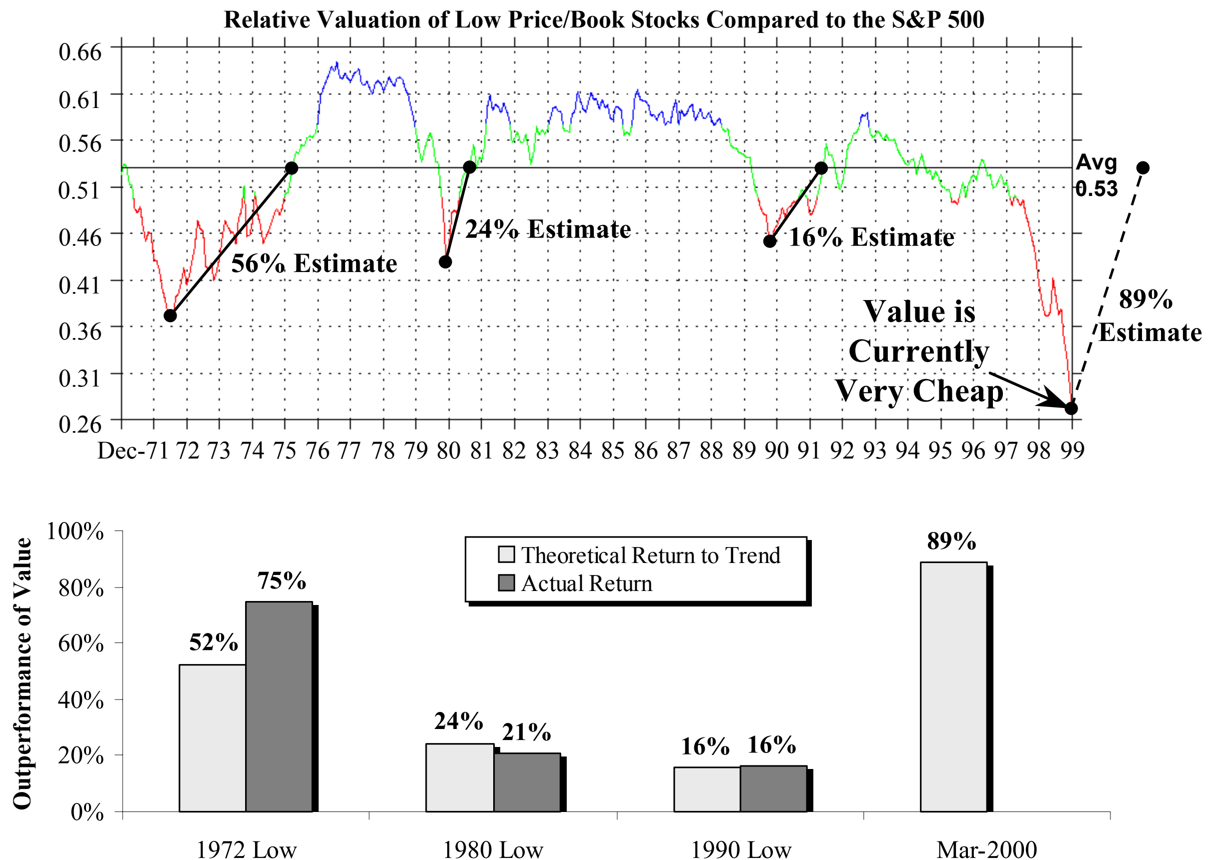
Last, Andrew Smithers has recently published a book Valuing Wall Street: Protecting Wealth in Turbulent Markets, which is a merciless and complete grinding of the bull market case. His view, based on Tobin's Q, is that equity prices will fall a lot. He also wrote an amusing and relevant short piece in the *London Evening Standard*, which is attached.

Heavyweight academic bulls are more difficult to find. Among them are hosts of "stockbroker economists", as Smithers calls them, whose views have to be suspect. Robert Merton, another Nobel Prize winner, is perhaps the heaviest artillery for the bulls. He is a leading proponent of efficient markets and the argument that however high or low the market, it is the best, wonderful working of the smartest, best informed minds – a view at long last steadily losing credibility. And even his credibility must be discounted by his involvement in Long Term Capital. It is a strange irony that the belief that markets are efficient led to the ultimate collapse of his firm.

Outlook

The ground certainly feels like it is beginning to shake. The NASDAQ as of this writing is off by a third. Industrial stocks, especially value stocks, are also off, but by much less. It is impossible, in our view, to predict whether we are at the beginning of a long-term recovery to value, but at least we see how air has rapidly deflated from the Internet bubble. If history is a guide, then we would expect to see a long-term relative return to value of more than 80%! The following chart shows theoretical and actual returns to value stocks in the U.S. when they were cheap by historic measures. The theoretical return incorporates both the expected return from a reversion to average price-to-book and a return of 3% per year as an imbedded component to investing in value stocks.

U.S. Value Opportunities



In each of the cases shown on the chart, value stocks returned to fair value, providing an actual return close to or significantly better than the theoretical return. Most importantly, value stocks in each of these instances actually overshot fair value, providing an even greater relative return.

While we have had “false starts” to a value rally before, there is a difference this time. Alan Greenspan, who previously championed the expansion of the stock market bubble by keeping money loose and by taking no actions adverse to the market, like increasing margin requirements, has been much more proactive recently in trying to deflate the bubble. Five interest rate increases, with more to come, may finally put the brakes on the run-away market.

We believe as fervently as ever that this recent market turmoil has not created a long-term buying opportunity for equity investors. The timing remains uncertain, but there is no doubt about the ultimate outcome. The savings rate, currently less than 1%, must eventually increase. Higher interest rates will eventually lead to a lower trade deficit and higher savings rate. A less benign economic environment will surely envelop us, although we hope and expect it to be merely subaverage rather than disastrous. It is not too late to rebalance portfolios in favor of value stocks, small stocks, REITs, bonds, emerging equities, and, where portfolio liquidity constraints allow, timber. Market neutral long-short strategies are also a compelling alternative. Our long-term outlook remains intact.

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