First Quarter 1999

Is Value Investing Dead?

This was about as bad as it gets for a young investment firm. We were trailing the market significantly and some clients were giving up on us. Other value investors screamed about the unfairness of it all or shut down and went home. Some capitulated and bought Yahoo. We dispassionately looked at the numbers and gained confidence in the fact that on every point, history was on our side. It wasn't easy, but we stayed the course.

Value investing as a discipline reached its most recent peak in February 1995. Since then, a naive low price-to-book strategy has underperformed the S&P 500 by more than 100 percentage points, the largest cyclical performance lag in 40 years. This result has led many investors to doubt the long run viability of value investing, and question whether the recent poor performance is really cyclical or whether there is a new investment paradigm which demands attention.

What's fascinating about the recent period of underperformance of traditional value is not that value strategies have yielded poor results. In fact, the annualized performance of a low price-to-book strategy has been 14% since the February 1995 peak, about in line with long-term stock market trends. Instead, the real issue is that the value style has failed to participate in a powerful rally driven by companies that have little, if any, valuation support. Many of these companies are technology oriented, either electronic or pharmaceutical, and have propelled the S&P 500 to recent annual gains more than 29%.

To explain these historically extraordinary gains, many investors have turned to the new paradigm argument; in other words, that this time is different. Needless to say these are charged words in the investment lexicon. We have identified the following four themes as the primary arguments offered as the proof that we are in a new paradigm:

1. Technology Rules
2. Price Doesn't Matter
3. Bigger is Better
4. Deflation is Here to Stay

We will examine all four of these theories and attempt to put some perspective on each.

1. Technology Rules

The world is changing. All one has to do is look around. There are computers on every desk and in every home. The Internet and e-commerce are changing the distribution economics of the global economy. Traditional ways of doing business are going by the wayside. Investing must reflect what is happening in the world.

In 1998, technology investors were handsomely rewarded. The technology sector of the S&P 500 appreciated by 78%, a full 50 percentage points ahead of the market. Does this make sense?

In a word, no. Let's consider the following facts:

The Worst of Times for Value Investors

Value stocks have won over time because their periods of outperformance have been far stronger than their periods of weakness. But value stocks have never fallen this far behind the market.

	Value Lags Jan 69 – Jun 73	Value Leads Jun 73 – Jul 79	Value Lags Jul 79 – Nov 80	Value Leads Nov 80 – Feb 89	Value Lags Feb 89 – Oct 90	Value Leads Oct 90 – Feb 95	Value Lags Feb 95 – Mar 99	Cumulative Annualized (Since 1/1/60)
S&P 500	19.3%	30.4%	45.6%	192.9%	11.3%	82.6%	185.9%	**12.9%**
Value Universe*	–16.8%	263.1%	22.5%	464.6%	–29.7%	199.9%	78.6%	**17.7%**
Difference	–36.1%	232.7%	–23.1%	271.7%	–41.0%	117.3%	–107.3%	**4.8%**

*Lowest price-to-book quintile of largest 1500 companies.

Technology has the most volatile, least sustainable earnings profile of any sector, yet new technology always generates excitement. The result is predictable — technology does not win over the long term.

Spending on technology is not growing significantly faster than other spending. In 1998, worldwide spending on personal computers increased by only 4%. This modest increase was the result of rapidly falling prices offsetting strong unit demand growth. Even if we add spending on telecommunications, Internet, software, services, and traditional hardware, worldwide growth was just 7% last year. Consensus expectations for 1999 are for 5%–10% growth in both categories. Perhaps even more telling is a comparison of domestic capital spending on information technology and non-information technology. Over the last five years, they are almost identical at 10.5% and 9.9% respectively. In sum, the growth in technology spending has been good, but not extraordinary enough to drive the current valuation extremes.

By their very nature, technology company earnings are unsustainable. While it is somewhat understandable for emerging technology stocks to skyrocket in the face of sweeping change, it is paradoxical that existing technology stocks go along for the ride. For example, IBM stock rose 82% in 1998 despite revenue growth of only 4% and earnings which were 6% below expectations at the start of the year. Similarly, Intel shares gained 74% in the face of 5% revenue growth and a 16% earnings shortfall. History shows that as new technologies emerge, they tend to displace the existing technologies. As a result, only 1 in 10 technology companies is able to retain its growth-stock status after 10 years (growth stocks are defined as those companies with above average revenue growth rates and ROE's).

Long-term returns on technology investing have been unspectacular. The technology sector has the most volatile and the least sustainable earnings profile of any sector in our economy, yet new technology always generates excitement. The results are predictable and obvious. Technology investing does not win over the long term.

2. Price Doesn't Matter

The returns to momentum strategies in the last 15 months have been spectacular. By their very nature, momentum investors buy whatever is going up. The thinking is, it doesn't matter what price level the stock started from. As long as the business remains good, the price continues to appreciate. For better or for worse, such strategies have propelled valuations to levels that can't be justified mathematically. Consider the following example:

Dell Computer sells for approximately 55 times current earnings. At a market value of $100 billion, and free cash flow of roughly $1.5 billion per year, Dell provides a cash flow yield of 1.5%. Investors obviously expect Dell's earnings to grow to justify the current valuation. The question is, by how much? We analyzed the sales growth that would be required for investors in Dell to earn a 10% discounted cash flow rate of return on their investment. We assumed that margins would remain at their currently lofty level (a level which even Dell management considers difficult to maintain). If we assume that the PC market matures

Remaining Growth Stocks

	% Remaining Growth Stocks After		Current
	5 Years	10 Years	P/E Ratio
All Growth Stocks	42%	19%	38x
Technology	32%	11%	60x

Source: Sanford C. Bernstein & Co.

Long-Term Returns on Technology Investing

Total Return	S&P 500 Technology Sector	S&P 500
Last 30 Years	11.2%	12.7%
Last 10 Years	21.9%	19.2%
Last 10 Years Ex. 1998	16.9%	18.2%

in 10 years, Dell would have to grow its top line by 26% per year over the next 10 years for the arithmetic to yield a 10% rate of return. For Dell to generate a 10% annualized return, it would either have to grow to over 50% of the worldwide PC market or it would have to successfully enter another business when the PC market matures.

3. Bigger Is Better

This argument has become central to the "new paradigm" thinking. Bolstered by the superior investment performance of large cap versus small cap stocks over the past several years, they point to the short-term trend and declare it permanent. The historical record suggests otherwise. Consider the table below showing that the 1990's are the first decade in the last four where the highly concentrated cap-weighted S&P 500 outperformed the equal-weighted and more diversified version of the index.

So we pose the questions, "Has the world really changed? Are today's bigger companies better able to capitalize on their market power and squeeze out their smaller rivals than the large companies of years past?" Conventional wisdom shouts out yes, of course. But the data strongly argues otherwise.

First of all, if we only consider the present, then the results are simple. The big companies are the winners hands-down. As the table below highlights, the higher profitability and growth rates for the biggest companies explains their recent share price rewards.

But the key question for investors today, and one that has become too easily lost in the momentum of the moment, still needs to be asked: Is the growth advantage sustainable? If the answer is yes, then common sense suggests we should be able to look at any point in history and see that the growth advantage identified for the large stocks was maintained in the years after their advantage was first measured. Let's look at what history tells us.

We compared the cap-weighted S&P 500 earnings growth to the equal-weighted earnings growth over each of the last 20 years. What we found when looking backward was exactly what one would expect — the bigger company dominated cap-weighted index grew 3.8% per year faster than the equal-weighted index on average. However, when we looked at the subsequent growth rates, i.e. the sustainability of the advantage, the results showed essentially no difference.

As a practical illustration, recall the path of the energy stocks starting in 1980. At their peak, they reflected 33% of the market value of the S&P 500 because of their tremendous prior earnings growth and widespread acceptance that such growth was a permanent condition. Needless to say, we all know the punch line. The growth didn't continue, and today the energy sector comprises only 6% of the S&P 500.

So, will the 42% of the S&P 500 that is made up of the technology, health care and consumer staples stocks be able to continue its dominance in the future? Only time will tell, but history is clearly not on their side.

Total Returns — S&P 500

	Cap Weighted	Equal Weighted
1960s	11.0%	13.4%
1970s	5.9%	9.1%
1980s	16.9%	18.8%
1990s	21.2%	18.2%
38 Years	12.8%	14.2%

S&P 500 ROE 1998 Cap and Equal Weighted

	Cap Weighted	Equal Weighted	Difference
ROE – 1998	25.5%	18.6%	6.9%
Five Year Growth ('93 – '97)	13.5%	10.9%	2.6%

Has the world really changed? Are the biggest companies really the fastest growing and most profitable? Conventional wisdom shouts out yes, of course. But the data strongly argues otherwise.

4. Deflation Is Here to Stay

The final paradigm — deflation is here to stay — may turn out to be right. Currently, inflation is benign and if inflation remains low, real interest rates are too high. However, the stock market already reflects this conventional wisdom. Using our model, 30-year interest rates would have to fall to 3.6% to restore the spread between expected return on stocks and bonds (the equity risk premium) to its historical norms.

At current interest rates, the market is approaching the overvaluation reached prior to the stock market correction of 1987. The market would have to fall by 25% to restore the historical equity risk premium.

Will current interest rates remain? It all depends on whether recent spectacular productivity gains will counter the upward pressure from wages, a stronger dollar and rising commodity prices. Fourth quarter productivity gains of 4.6% dwarf the most recent 20-year annual average of roughly 1% and the 50-year history of about 2.5% annual gains. Growth stocks have typically been the beneficiary of falling interest rates as their P/E ratios are bid up to higher levels reflecting the lower interest rate environment. If productivity gains fail to propel interest rates lower, the risk is high that growth stock multiples would decline.

By any historic measure, the current assumptions priced into the market are at best unrealistic and at worst delusional. ■

Growth Rate Advantage

	Growth Rate Advantage of Cap Weighted vs. Equal Weighted
Five Years Before Ranking	3.8%
Five Years After Ranking	0.3%