The Parable of the Boiled Frog

The vicar at Holy Trinity Brompton in London used to recount the parable of the boiled frog from time to time. In his sermon, he would first tell us what would happen to a frog which was thrown into a pot of boiling water on the stove: the frog, upon the first contact with the scalding water, would leap out of the pot to safety. On the other hand, the same frog, placed into a pot of luke warm water on the stove which was slowly brought to a boil, would not notice the gradually increasing heat but would eventually end up as a delicacy on the plate of a Frenchman. The vicar would then compare the slow but consistent moral decline in the culture of the west since the 1960's to the fate of the frog who realized too late that the temperature of the water was deadly. It would gradually dawn on the congregation that we, too, were in the pot. If we became accustomed to the manners and morals of our age, we might end up as dead as the frog. It was a powerful sermon - one that grabbed your attention and that you do not easily forget.

As I was reflecting on the remarkable U.S. bull market which resumed its powerful advance in the second quarter of this year, I could not help but think of the boiled frog parable. Three years ago, when Bradley, Foster & Sargent, Inc., commenced operations as an independent corporate entity, the S&P 500 Index was at 450. The P/E ratio on the S&P 500 Index was approximately 14.5 times trailing operating earnings. We would rarely buy stocks - even the best and most consistent growth stocks at more than 15 times forward earnings. Three years later, the S&P 500 Index has doubled to 918, and it has become increasingly hard to find good stocks to buy at less than 20 times 1998 earnings. Other measures of valuation are just as rich. Both the ratio of market price to book value at 4.5 and the ratio of market price to sales of 1.4 for the S&P 500 Index are at their highest levels ever. In terms of market price to dividend valuation, the current level of 55 is off the charts, according to Jeffrey Applegate of Lehman Brothers. The previous high was 37. The question, of course, is: How hot is the water now? Are we in danger of having been lulled into complacency by the gradually increasing valuation of the stock market, which may already be risky to our financial health?

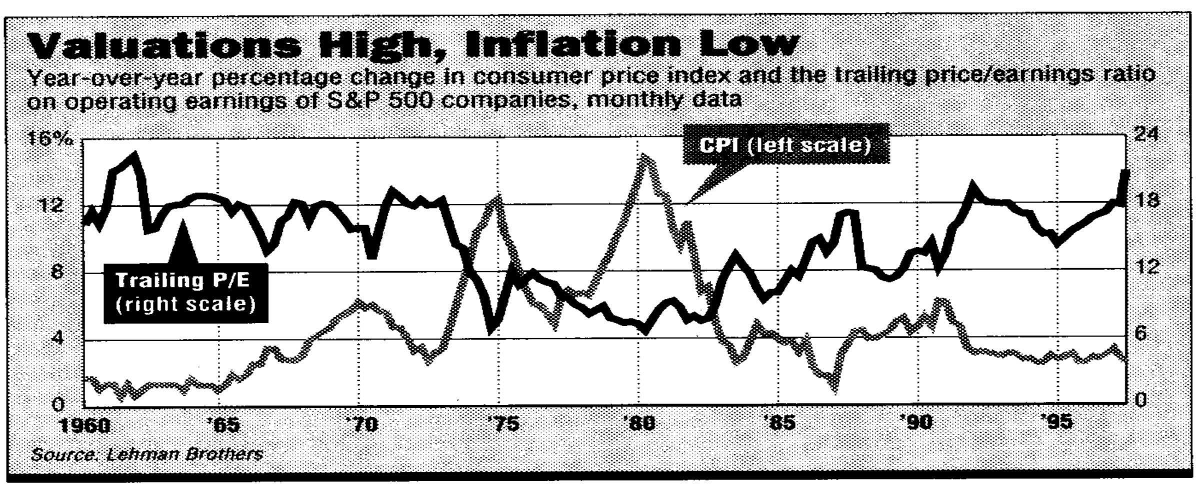
It would be easy, of course, to look at the relatively expensive valuation of the stock market, throw up one's hands at the overvaluation of the stock market, and bail out. That has been the advice of many savvy investment professionals over the past fifteen years, but it has turned out to be dead wrong. If one has had the courage to remain invested from August, 1982, when the bull market started through today, one has participated in the longest running and most remarkable bull markets of this century. Over the past fifteen years, in fact, the stocks in the S&P 500 average have provided an average annual return of 19.1% to investors, according to Andrew Bary writing in Barron's. That narrowly beats the 15 year bull market that began six months after Pearl Harbor and ended in 1957, which returned an average annual return of 19% a year to investors. The third best 15 year stretch was the one that ended in the Great Crash in 1929, which provided investors with an average annual return of 17.4%.

There are several important conclusions to draw from this data: First, these markets tend to last much longer than one expects. Secondly, the great bull markets do not necessarily have to end with a precipitous decline. While one great bull market ended in a crash in 1929, the bull market from 1942-1957 continued for another decade before the difficult period between 1968 and 1982. Finally, it is important to resist the natural inclination of taking the chips off the table as valuations become expensive, because economic fundamentals may remain extremely positive for years to come. Let's review the economic fundamentals.

The Rule of 20

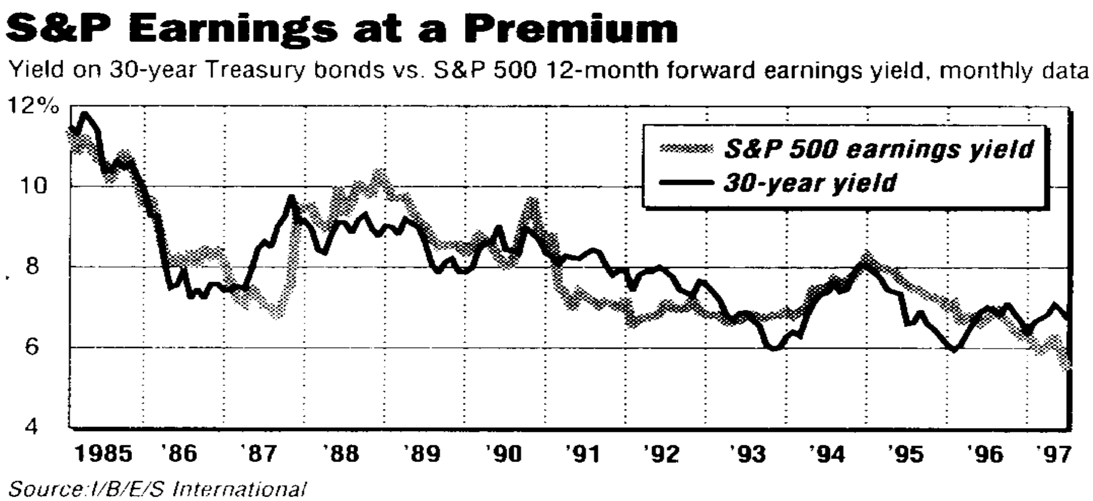
One of the stock market's rules of thumb, which has worked well over the decades, is that the stock market will tend to be valued at a multiple of its earnings times the rate of inflation subtracted from twenty. For example, if the inflation rate is 5%, the market price earnings ratio should be 15 (i.e., 20 less 5). For the past year, the consumer price index (CPI) registered a gain of only 2.5% (for the core rate which is the basket of items less food and energy). If all items were included, the CPI index for this period was only 2.2%. If we take into account that the eminent economists on the Boskin Commission last year calculated that the CPI overstates the rate of inflation by at least 1%, we arrive at an inflation rate of approximately 1% for the past 12 months.

If the real rate of inflation in the U.S. is approximately 1%, the rule of twenty suggests that the stock market should be valued at 19 times earnings. Abby Cohen, is a well known investment strategist at Goldman Sachs, who has been consistently bullish and more on target than most of her peers over the past several years. She is forecasting 1998 operating earnings for the Standard & Poor 500 Index of $51 - up from an estimated $47 for 1997. With a P/E multiple of 19 calculated on Goldman Sachs' forecasted earnings for 1998, we arrive at an S&P 500 valuation of 969 compared to 918 - where the S&P 500 close today - a difference of 5.5%. If we take the same approach on 1997 forecasted earnings, we arrive at a value for the S&P 500 of 893 - 2.7% below today's close. In either case, the rule of 20 suggests that the stock market is about where it should be. The chart below produced by Lehman Brothers presents the critical relationship between stock market's valuation and the rate of inflation:



Stocks Track Interest Rates

While the Rule of 20 points to a stock market which, while not inexpensive, is appropriately valued, there are other rules of thumb which are more worrisome. One of them is the long term correlation between bond yields and stock prices. Over the past decades, the earnings yield of the S&P 500 (the twelve month anticipated earnings of the companies in the S&P 500 Index divided by the price of the S&P 500 Index) has closely tracked the yield of the 30 year U.S. Treasury Bond, according to Roger Lowenstein writing recently in the Wall Street Journal. While from time to time, these yields have diverged: they invariably have come back into parity - either through interest rates adjusting up or down or the stock market changing course. Currently, there is a major divergence as shown by the following chart:



At the moment, with the S&P 500 at 918 and 1998 forecasted earnings of $51, the S&P earnings yield is a paltry 5.55%. Meanwhile the yield on the 30 year U.S. Treasury Bond is 6.58% - a difference in percentage terms of 15.65%. This is a significant divergence which needs some explanation. The bears maintain that stocks are significantly overvalued, and it is only a matter of time until the stock market has a nasty correction of 10-20%. In a recent Barron's article, eight well-known investment strategists from various prestigious Wall Street firms gave their market forecasts for year-end 1997: seven of the eight predicted market declines ranging from 8.8% to 15%. Only Abby Cohen predicted an increase in the S&P 500 by year-end. If Cohen is correct, the market increase would most likely come about through either a drop in long term interest rates or an increase in forecasted 1998 earnings or both.

Another reason for the above divergence is that investors probably demand an inflation premium for bonds which is higher than historical trends would suggest. In other words, the scars of the inflationary years in the 1970's and early 1980's have caused investors to demand higher bond yields than would normally be justified by the current level of inflation. With inflation of only 2.5%, (according to the CPI Index) and the historical inflation premium above bond yields of 3%, long term bond yields should be closer to 5.5% than the current 6.58%. While this may be the case, it is hard to see investors buying long term government bonds at yields of 5.5% with performance of the 1970's etched in their memories

Summary

While there is considerable data which shows that large capitalization growth stocks are not inexpensive, (and by many standards of measurement, global brand name companies such as Coca Cola, Gillette, and General Electric may well be overvalued), there is also a significant body of data which shows that bull markets do not end because the stock market become 10-15% overvalued. Bull markets usually end when the economic and political fundamentals deteriorate. This remarkable bull market will end when inflation begins to accelerate or when corporate profits, cash flow and margins drop or when both occur. Other key factors which will influence the stock market are U.S. fiscal and monetary policies, which now seem remarkably positive with a combination of lower budget deficits and both income and capital gains tax relief. The duration of the capital spending boom associated with the technological revolution and the increasing globalization of the market will have much to do with the length of the bull market, and the latter, of course, will be much affected by the absence of serious military conflict around the world. Finally, the liquidity available to the stock market, through increased savings via 401 (k) plans and IRA's being invested into equity mutual funds, will provide a powerful impetus to the stock market prices.

While all the above gives us some confidence that the bull market will continue, it is also clear that there is very little room for disappointment in stocks. Most of the good news is already factored in the prices. Thus, there is definitely more risk in the stock market today than there was in 1994, but there is also risk in trying to time the market and having to little invested in stocks. To return to the boiled frog parable, we believe that the water is hot but not ready to boil - unless some unforeseen factor emerges. We are not ready to jump out of the pot.

As we said in our April outlook, we believe that we are still in a bull market. Yet we re-iterate our cautionary words about lower expectations. The stock market has doubled over the past three years, and market's continued advance will likely be punctuated by volatility, corrections and a return to more modest returns. Nonetheless we continue to believe that investing in high quality, established companies, which can take advantage of the positive economic and political conditions which currently prevail, will pay off in the long run.

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