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HOW SAFE IS THE S&P 500?

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> *September 11, 2001 – As the following newsletter goes to press, we mourn the tragedy of the terrorist attacks that took place earlier today. The devastation to humanity and freedom is immense and enduring. Our fiduciary responsibility requires us to contemplate the implications of these events for our clients. The weakness in our economy may be exacerbated. However, for equity investors with time horizons of five years or more, we continue to believe those U.S. common stocks with attractive valuations are appropriate investments. Yet today's events underscore the point of the following letter that the future is fraught with uncertainty, so investors must be compensated for committing certain dollars in exchange for an uncertain return in the future. We are always vigilant to ensure that our clients are investing at sufficiently attractive prices to compensate for such risk.*

Through August our year-to-date and since inception results for clients and mutual fund shareholders are excellent on both an absolute and relative performance basis. More importantly, we continue to believe our portfolios contain stocks that are attractively valued.

Many investors are wondering if the bear market is near its end. At the end of August, the S&P 500 hovers around 1135, down more than 13% year-to-date and nearly 26% from the peak in March of 2000. The frequently asked question: "Is it time to invest?" My initial thought is always "It depends on the investment under consideration." If the S&P 500 index is that investment, my best estimate is that it will provide a 5% annualized total return over the next decade. Our 5% forecast assumes that the S&P 500 price-earning ratio will revert to its long-run average of 14, from a level today some 50% higher, primarily due to slower (but not necessarily poor) earnings growth this decade. Expressed one way, notwithstanding the 26% decline, earnings still need to "catch up" with current prices. I will leave it to the reader to decide if 5% represents a satisfactory return given the risk inherent in owning portions of some of the largest market capitalization corporations in the U.S. My strong suspicion, however, is that investors in general would be quite disappointed by this result.

Fortunately for us, (1) the S&P 500 does not represent the entire U.S. stock market and (2) we do not have to own the same stocks in the same proportion as the S&P 500. In fact, I believe the median stock in the Wilshire 5000 will return 10% annually during the next decade. How can this statement be consistent with an S&P 500 return of 5%? First, the S&P 500, with a total market capitalization of approximately $10.6 trillion represents about 80% of the market capitalization of the Wilshire 5000, a broader measure of the U.S. market. Second, as with many capitalization weighted indices, the S&P 500 is dominated by a subset of the portfolio. Just 40 of the 500 companies in the index comprise 50% of the market capitalization. Therefore, the return experienced by the median stock in the index can differ greatly from that of the overall index. Consider the results in 1999 and 2000 (two unusual years to be sure). In 1999, the index returned about 20% while the majority of stocks declined. In 2000, the reverse was true, as the benchmark declined more than 9% while the majority of stocks in the index posted gains. To give a greatly oversimplified example, imagine this scenario:

Total Market Cap.	Current p/e	10 Yr EPS Growth	Yield	Terminal p/e	10 Yr Expected Return
50%	32x	8%	0.6%	16x	1.3%
50%	12x	6%	2.0%	14x	9.7%
100%	22x	7%	1.3%	15x	5.5%

In stating my belief that the p/e ratio will decline dramatically, I recognize that market commentators who sounded the alarm that valuations had risen above the historic norm spent the latter years of the 90's looking like "chicken little" as p/e ratios expanded upward. So perhaps it is wise to acknowledge that no one ever knows exactly what path the "market" will take. But that does not help in formulating long run return expectations, so let's try to build a case from the ground up economically, keeping in mind that in the long run, the aggregate return of investors can only be what the businesses earn over time.

It may be helpful to consider the inverse of the price-earning ratio: the earnings yield. The inverse of a 14 p/e results in a 7.1% earnings yield. Any portfolio of companies that paid out all of their earnings in dividends should expect to have growth only through inflation and productivity gains. If both inflation and productivity gains totaled 4%, then adding that to the earnings yield would suggest a possible total return of about 11%, a return consistent with historical experience.

Now consider the inverse of a p/e ratio of 22 (roughly where we are today) is 4.5%. Adding the same 4% gain from inflation and productivity would result in a total return of 8.5% if, and this is a big if, you are able to sell at a similar multiple. But as seen in the table, if the terminal p/e multiple (i.e., the p/e multiple at the end of the ten year period) is more in line with historic averages, say 15, your total return drops from 8.5% to 5.5%. Compared to bond yields, even I do not believe that this is an attractive risk/reward proposition.

Again, no one knows what the p/e will be in ten years or whether earnings will grow at 7% over that period, but we feel that it is reckless to require a terminal p/e of 22 and 7% earnings growth to achieve an 8.5% total return. To defend a 22 p/e ratio as continuing ad infinitum, one must believe there is something special about the S&P 500 portfolio companies, either because these companies will grow faster than the economy and/or they are less risky than history would suggest.[1] Over ten year periods, investors paying a p/e multiple as high as 22 have historically achieved below average annual returns in a range of 5% down to negative returns. In other words, I believe that the superior returns stocks (relative to bonds) have delivered to investors were contingent upon valuations according to p/e ratios in the range of 12 to 16.

Is it possible that companies in the S&P 500 can grow earnings appreciably faster than in the past? Over long periods of time, aggregate corporate profits should parallel nominal Gross Domestic Product. Our trend line forecast for this decade is for real GDP to grow 3% annually with inflation adding 3%, summing to 6% nominal GDP growth per year.

Any difference between corporate profits and nominal GDP can be explained by productivity gains, some foreign activities, and any increased share of the economy these companies take from the rest. If earnings growth does exceed nominal GDP growth over the next decade, the most optimistic forecast we could imagine would be an annual rate of 7%. Yet, mathematical complications arise when it is assumed that earnings growth can exceed nominal GDP indefinitely. Namely, corporate profits would capture a growing and disproportionate share of the economy, a phenomenon that cannot be supported by empirical evidence or economic or political theory.

Despite how far our 5% forecast differs from a possible consensus of 10%, I believe that the above discussion supports this conclusion better than two common statements. The first is: "since 10% is the long term average, I'll use that in my forecast for the decade." The second is: "I need 10%, given a risk premium over corporate bonds." As to the first: the long-term average return is probably indicative of a purchase price at some equilibrium, versus a presently over-valued price level. As for the second: what one needs (wants), is unrelated to the economics of the situation.

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[1]The S&P 500 does benefit from changes in its composition, thus helping growth somewhat. A higher p/e could also be justified by significantly lower interest rates or a dramatic reduction of the risk premium required by equity investors. We feel that it is unlikely that interest rates will decline significantly over the next decade. Also, are stocks becoming less risky than they have been historically? First, stocks remain a residual claim (versus debt). Second, to the degree volatility is any proxy for risk, they are no less volatile now than they have been over time.