



January 8, 2009

Fourth Quarter 2008 Client Letter “Capital Market Expectations and Valuations”

Investment counseling helps investors do the right things. The investment counselor's main professional task is to help each client identify, understand, and commit consistently and continually to long-term investment objectives that are both realistic in the capital markets and appropriate to the objectives of the client. The hardest part of the work is not figuring out the optimal investment policy; it is staying committed to sound investment policy and maintaining what Disraeli called “constancy to purpose.” Sustaining a long-term focus at market highs or lows is notoriously hard. In either case, emotions are strongest and current market action appears most demanding of change because the apparent “facts” seem most compelling. This is why being rational in an emotional environment is not easy. Holding on to a sound policy through thick and thin is extraordinarily difficult and extraordinarily important work. This is why investors can benefit from sound investment. The cost of infidelity can be very high.

- **Charles D. Ellis** Winning the Loser's Game

Introduction

The quote from Charles Ellis sums up our purpose as your advisor relating to your investment strategy; to help you stay focused on your objectives for the full term of your investment time horizon. I want to congratulate the vast majority of our clients who have remained disciplined, have not succumbed to panic and have stuck to their investment plan. In hindsight 2008 will surely go down in history as one of the most trying markets for investors. In fact, equity investors have been liquidating equity mutual funds in large amounts recently, culminating with \$70 billion flowing out of equity mutual funds in the month of October alone (see our recent Burton Malkiel letter for examples of poor investor timing in and out of mutual funds). Investors who have liquidated their funds recently will likely lock in low returns over their investment time horizon. To the extent we have played a role in your prudence we feel a deep sense of satisfaction because we believe you are doing the right thing for your financial future.

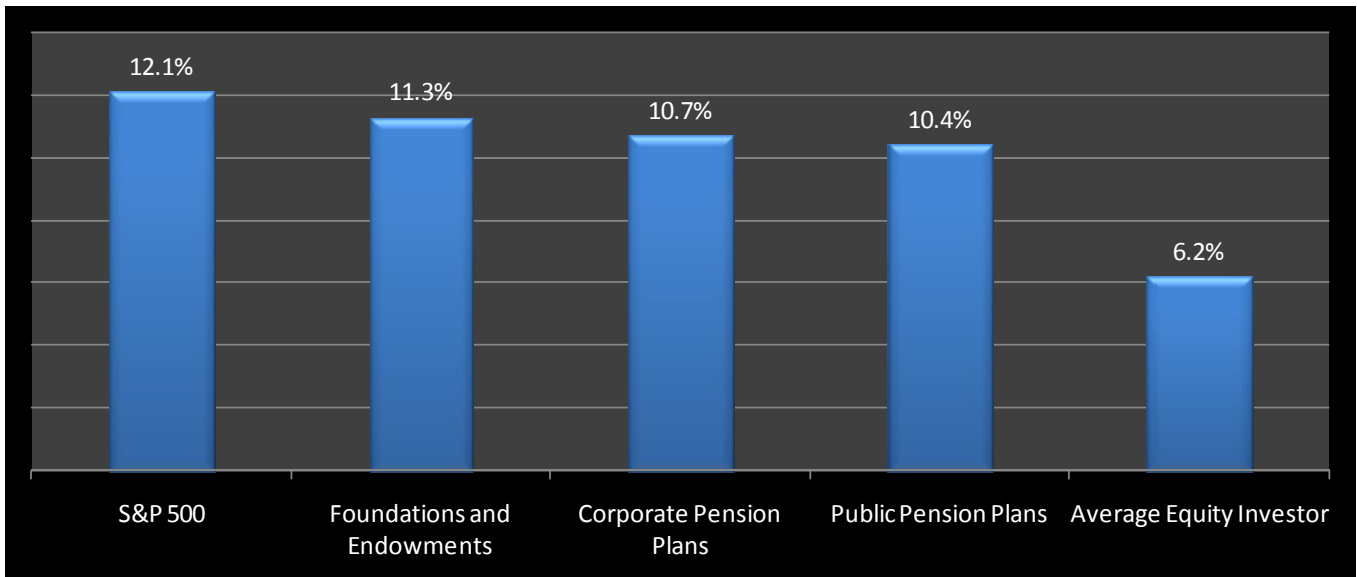
Ellis titled his book *Winning the Loser's Game* because he recognized that beating the market has become an increasingly unlikely proposition for individuals and professionals. The 1960s marked a change in the game of investing; one in which a smaller number of sophisticated institutional investors competing against a mostly unsophisticated group of individual investors pre-1960s turned to a game where the most sophisticated investors are pitted against each other. In the 1960s institutional investors made up only 10% of trading volume while individuals made up 90%. The institutions could take advantage of the unsophisticated investors who dominated the market trading. Now institutions make up 90% of the trading volume and individuals are 10%. Ellis published a paper in the *Financial Analyst Journal* in 1975 describing his contention that picking stocks and market timing was a losing proposition and continues to support that notion today.

A ‘loser's game’ is described as one in which the game is lost most often by the poor choices made by one of the opponents rather than won by the good choices made by the winner. Scientist and statistician Simon Ramon examined this by comparing professional tennis with amateur tennis matches. His studies concluded that the victories of expert tennis matches could be explained by the actions of the winner 80% of the time while the victories of amateur tennis players could be attributed to the actions of the loser 80% of the time. Expert tennis is a winner's game while amateur tennis is a loser's game. The key to winning in a loser's game is to avoid making big mistakes. In tennis, the losers of amateur matches

failed to stay focused on simply getting the ball back over the net. They would double fault on serves and during a volley the losing players would often hit the ball into the net while attempting an ace shot. Losers attempted shots that they were not skilled enough to make consistently rather than avoiding major errors.

We agree with Mr. Ellis that investing in the financial markets is a loser's game for many. Sadly, many investors do not focus on avoiding big mistakes. For example, instead of holding the course in a well diversified portfolio they attempt to time the market, often selling after markets decline and buying after markets recover. Investors chase the best performing sectors or investments after the fact. Investors engage in these activities not realizing that for every market winner there is a loser on the opposite side of the trade. Large institutional investors are likely to take the small investor for a ride. Interestingly, few professional stock and bond pickers have long track records of success (virtually none that are statistically significant) in beating their peers or the market consistently. However, they have done better than the average equity investor. Individual investors often overlook the fact that their odds of market beating success are even lower than the professionals they are competing against.

Figure 1: Institutionalized Profits Ten Year Period 1995 – 2004



The S&P data are provided by Standard & Poor's Index Services Group. Other performance data provided by Dalbar Inc. and Mercer Investment Consulting Inc. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Values change frequently and past performance may not be repeated. There is always the risk that an investor may lose money. Even a long-term investment approach cannot guarantee a profit. Economic, political, and issuer-specific events will cause the value of securities, and the portfolios that own them, to rise or fall. Because the value of your investment in a portfolio will fluctuate, there is a risk that you will lose money. Indices are referred to for comparative purposes only and do not represent similar asset classes in terms of components or risk exposure; thus, their returns may vary significantly. The S&P 500 Index measures the performance of large cap US stocks.

To win the investment game investors must stay focused on making prudent, rational decisions and avoid making big mistakes. This means holding the course, even when everything in your gut is telling you that heading for the hills is the best thing to do. Institutional investors as a group cannot beat markets since they are the market. In fact, as a group they lose to the market because of the expenses they incur in their endeavor. Realizing this means that our goal as investors should be to look for the best way to participate in markets rather than attempt to outsmart them. Your Empirical portfolio represents this approach.

There is a lot we can learn by examining the behavior of investors, in fact, our next quarterly letter will be dedicated to the topic of behavioral finance (also known as investor psychology or neuroeconomics).

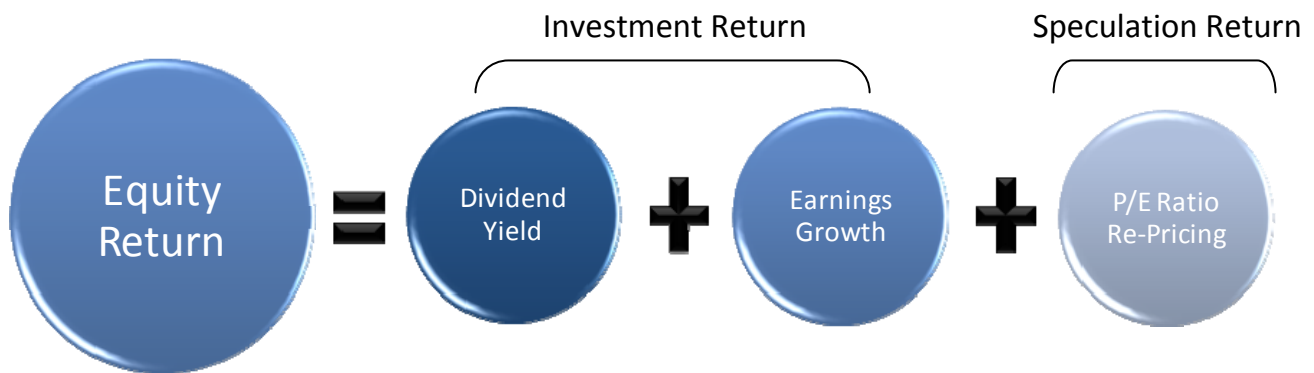
By studying how the rational and emotional areas of our mind interact to make financial decisions, we can put in to place systems to avoid costly common mistakes. The remainder of this letter is dedicated to establishing a range of reasonable equity and fixed income returns over the next ten years.

Market Return Expectations

The process of estimating future returns is referred to as setting capital market expectations. We start by explaining market returns of the past so we can apply a rational approach to establishing a range of possible forward returns. In our second quarter 2007 client letter we presented you with our range of ten year return estimates and an explanation of the uses for developing return expectations. For reference, the 2007 letter is archived in the resource section of our website (empiricalwm.com). We thought it timely to update our ten year return estimates beginning from January 2009. As we meet with you this year to review your financial goals and your asset allocations we will use this work as an additional resource for decision making.

In this paper, as in our past review, we stay focused on the S&P 500 for equities and the 10 year Treasury bond for fixed income. The historical difference in returns between equities and fixed income is called the equity premium. It is important to consider the equity premium along with inflation when making asset allocation decisions. It is wise to make our investment decisions based on the set of investment options we have at our disposal today with an eye toward fighting inflation. During low inflationary periods we need less of a return to preserve our wealth than we do during high periods of inflation.

Sources of Returns



We separate stock market returns into two components: Investment and Speculation. The investment component is from dividend payments and growth in corporate earnings. The speculation component is caused by changes in how investors value corporate earnings as reflected in the price to earnings ratio. Over the long run, speculation plays almost no role in stock market returns (it is responsible for 0.3% of the 8.7% average annual return since 1880). Long run stock returns are created almost purely by dividends and earnings growth. However over short periods, drastic changes in investor sentiment can create wild swings in the speculation return, overwhelming the investment component. The portion of return resulting from an increase or decrease in the P/E ratio is referred to as P/E ratio re-pricing.

Below is a chart showing the various components of stock returns for each decade since 1880. Here we estimate the dividend component by using the initial dividend yield. As you can see, by adding the initial dividend yield, the 10 year average earnings growth (AEG) and the P/E ratio re-pricing, we obtain a reasonably close estimate of the actual returns, which is generally wrong by less than 0.5%.

Figure 2: Components of S&P Composite Index Stock Returns since 1880

		1	2		3	1+2+3		
Start	End	Initial	10-Year	Closing	P/E Ratio	Calculated	Actual	
1-Jan	31-Dec	Yield	AEG	P/E Ratio	Re-pricing*	Return	Return	Difference
1880	1889	4.1%	-2.3%	17.7	3.2%	4.9%	6.0%	1.1%
1890	1899	4.1%	4.8%	12.5	-3.4%	5.5%	5.7%	0.1%
1900	1909	3.5%	4.7%	13.6	0.8%	9.0%	10.3%	1.3%
1910	1919	4.3%	2.0%	9.6	-3.4%	2.9%	4.5%	1.6%
1920	1929	5.9%	5.6%	13.3	3.3%	14.9%	15.2%	0.3%
1930	1939	4.5%	-5.7%	13.7	0.3%	-0.8%	-0.1%	0.7%
1940	1949	5.0%	9.9%	7.1	-6.4%	8.6%	9.2%	0.6%
1950	1959	6.9%	3.9%	17.4	9.3%	20.1%	19.4%	-0.8%
1960	1969	3.1%	5.5%	15.8	-1.0%	7.6%	7.8%	0.2%
1970	1979	3.5%	9.9%	7.3	-7.5%	5.9%	5.9%	0.0%
1980	1989	5.2%	4.4%	15.2	7.7%	17.4%	17.6%	0.2%
1990	1999	3.2%	7.7%	29.7	6.9%	17.8%	18.2%	0.4%
2000	2008	1.2%	0.0%	18.2	-5.3%	-4.1%	-3.8%	0.4%

*Starting P/E Ratio in 1880: 12.9

The S&P data are provided by Robert Shiller, used in the book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005], updated. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Values change frequently and past performance may not be repeated. There is always the risk that an investor may lose money. Even a long-term investment approach cannot guarantee a profit. Economic, political, and issuer-specific events will cause the value of securities, and the portfolios that own them, to rise or fall. Because the value of your investment in a portfolio will fluctuate, there is a risk that you will lose money. Indices are referred to for comparative purposes only and do not represent similar asset classes in terms of components or risk exposure; thus, their returns may vary significantly. The S&P 500 Index measures the performance of large cap US stocks.

Predicting Earnings Growth

As shown in the table below, S&P Composite Index average earnings growth since 1871 has been 3.53%. However, since 1945 it has been much higher at 6.30%. This difference may be explained by the higher inflation rate in the postwar period and the decline in dividend payments. With firms paying less cash out to shareholders, they have more capital to raise earnings through internal investment or stock repurchases.

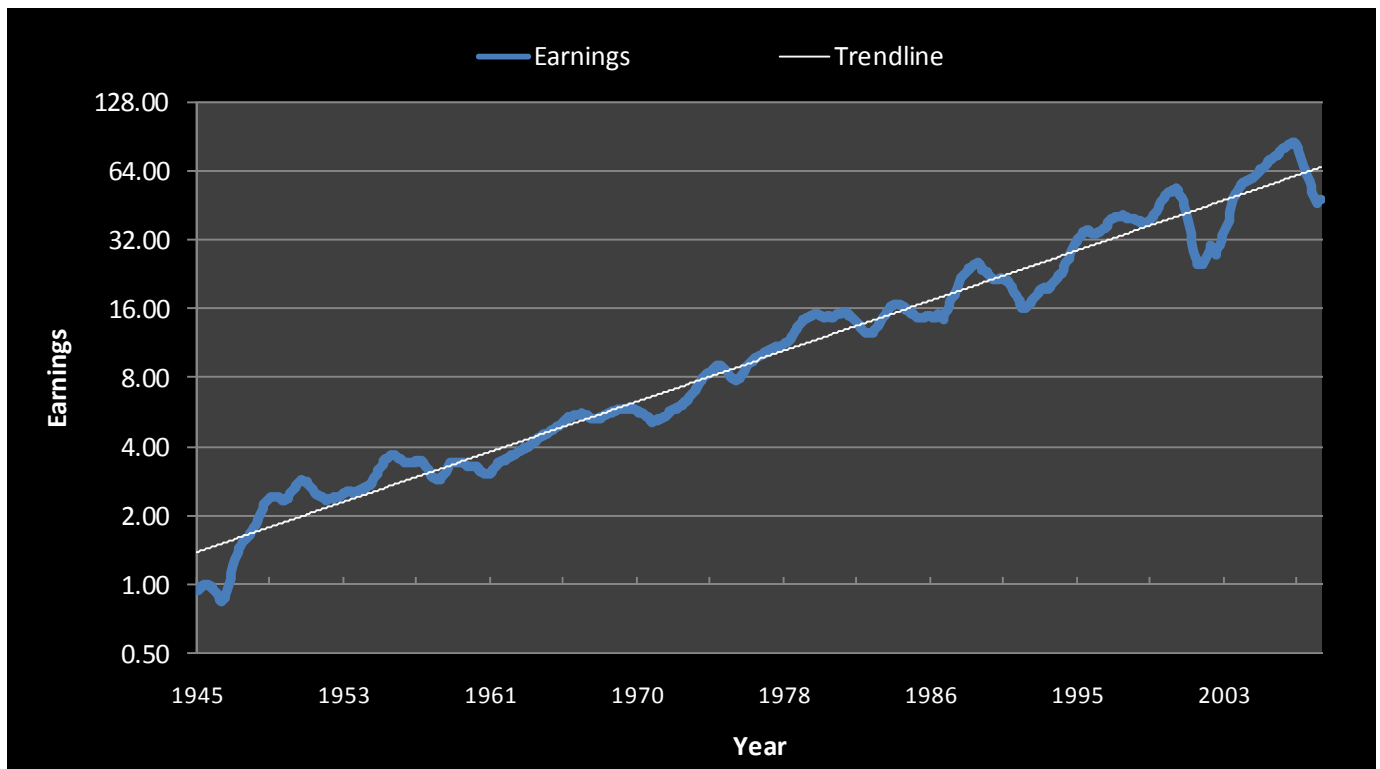
Figure 3: Predicting Earnings Growth

Time Period	Earnings Growth	Inflation	Average Dividend Yield
1871 - 2008	3.53%	2.06%	4.51%
1871 - 1944	1.16%	0.48%	5.33%
1945 - 2008	6.30%	3.92%	3.56%

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Figure 4 below shows the consistency of earnings growth in the postwar period. As can be seen, since mid-2007 earnings have dropped drastically, they are now 43% below their July 2007 high. If over the next ten years earnings were to catch up with the postwar trend, it would necessitate a 9.70% growth rate in earnings over the decade. It is our view that a prudent approach in projecting 10 year earnings is to assume around the postwar average of 6.30%. This seems reasonable when considering that we have had zero earnings growth (Figure 2) for the last 9 years and there is a historical precedent for markets reverting to their long term averages.

Figure 4: S&P 500 Earnings since 1945

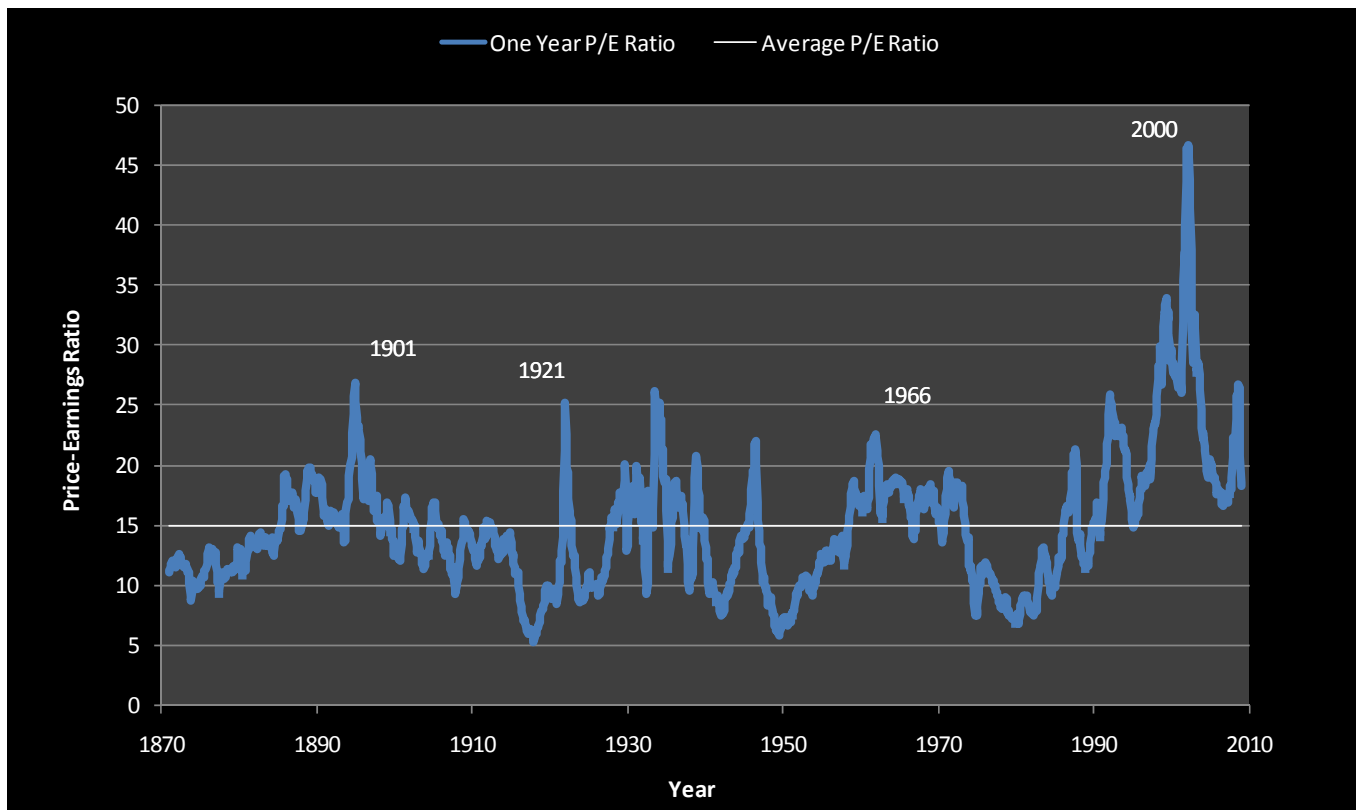


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P/E Ratio Re-pricing

The average P/E ratio since 1871 is 14.95. As can be seen in Figure 5, since 1870 the S&P Composite Index P/E ratio has had a tendency to revert back to its long term average after periods of exuberance or pessimism. Another thing to note: P/E ratios tend to be higher when interest rates are low. Currently long term interest rates are some of the lowest on record. We believe the most prudent way to estimate the P/E ratio re-pricing return is to assume that the P/E will gravitate toward a range around the long term average (again a reversion toward the average or mean) over the next ten years.

Figure 5: S&P Composite P/E Ratio since 1871



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Expected Returns

Now that we have looked at all three variables of stock returns, (initial dividend yield, future earnings growth and P/E ratios) we can look at possible rates of return. As of December 31, 2008 the yield of the S&P 500 was 3.24% and the P/E ratio was 18.26. Based on these numbers, Figure 6 calculates the future 10 year return for different assumed closing P/E ratios and earnings growth numbers.

We do not claim to know the exact expected return of stocks, or even guarantee a range of returns. We do believe however that based on this analysis we can identify a likely set of possibilities. From this base one may examine what must occur in order for a major deviation in returns (optimistic or pessimistic). The highlighted (blue) range of returns in Figure 6 represents possible returns for the S&P 500 using the estimates we previously discussed. The historical data presented earlier in this letter provides a set of reference points.

Figure 6: 10 Year Returns for Varying Earnings Growth and Closing P/E Assumptions

		Closing P/E Ratio									
		7	9	11	13	15	17	19	21	23	25
Average Earnings Growth	-4%	-9.9%	-7.6%	-5.7%	-4.1%	-2.7%	-1.5%	-0.4%	0.6%	1.6%	2.4%
	-2%	-7.9%	-5.6%	-3.7%	-2.1%	-0.7%	0.5%	1.6%	2.6%	3.6%	4.4%
	0%	-5.9%	-3.6%	-1.7%	-0.1%	1.3%	2.5%	3.6%	4.6%	5.6%	6.4%
	2%	-3.9%	-1.6%	0.3%	1.9%	3.3%	4.5%	5.6%	6.6%	7.6%	8.4%
	4%	-1.9%	0.4%	2.3%	3.9%	5.3%	6.5%	7.6%	8.6%	9.6%	10.4%
	6%	0.1%	2.4%	4.3%	5.9%	7.3%	8.5%	9.6%	10.6%	11.6%	12.4%
	8%	2.1%	4.4%	6.3%	7.9%	9.3%	10.5%	11.6%	12.6%	13.6%	14.4%
	10%	4.1%	6.4%	8.3%	9.9%	11.3%	12.5%	13.6%	14.6%	15.6%	16.4%
	12%	6.1%	8.4%	10.3%	11.9%	13.3%	14.5%	15.6%	16.6%	17.6%	18.4%

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Bond Returns & the Equity Premium

As of December 31, 2008, the ten year US Treasury note was yielding 2.2%. The stock market would have to earn more than this risk-free rate in order to be a worthy investment. We highlighted the returns in Figure 6 which we believe to be conservative and reasonable assumptions. As you can see, in order for there to be a zero or negative equity premium two events must transpire: the P/E ratios and or earnings must contract below historical norms over the next ten years (the last nine years show zero earnings growth). Further, as shown in Figure 7, we are not invested solely in the S&P 500 index; we have included several other equity asset classes which may contribute to a higher forward return. Many of these asset classes have a history of delivering a return premium over the S&P 500 and have declined more dramatically than the S&P 500 index recently. This means that historically higher returning asset classes are trading at cheaper valuations.

Other Asset Classes

Figure 7 is a table representing the valuations of some of the equity asset classes we allocate to. This information is provided to us by Dimensional Fund Advisors (DFA), and represents the characteristics of mutual funds that track each asset class. You will notice that the P/E ratios seem much lower than the ones used above, this is because DFA, like many other popular data providers, excludes companies with negative earnings, skewing the P/E ratio downwards. However, for purposes of comparing asset classes it is only important that the numbers are calculated consistently. As you can see, many asset classes are valued more cheaply than US large cap stocks.

Figure 7: Valuations by Asset Class

Asset Class	Symbol	Weighted Avg. Book-to- Market	Price/Earnings (Ex-Negatives)	Dividend Yield
US Large Cap	DFLCX	0.65	10.01	3.03
US Large Value	DFLVX	1.36	8.04	3.25
US Small Cap	DFSTX	1.18	10.62	1.52
US Small Value	DFSVX	1.44	9.57	1.69
US Microcap	DFSCX	1.23	9.88	1.5
Intl. Large Cap	DFALX	0.77	7.75	4.5
Intl. Large Value	DFIVX	1.2	6.27	5.53
Intl. Small Cap	DFISX	1.19	7.33	4.37
Intl. Small Value	DISVX	1.74	6.31	4.77
Emerging Large	DFEMX	0.69	7.61	3.99
Emerging Value	DFEVX	1.17	5.87	4.17
Emerging Small	DEMSX	1.48	5.53	5.02
US Real Estate	DFREX	0.88	18.65	8.66
Intl. Real Estate	DFITX	1.64	9.36	9.42

*As of 11/30/2008

Asset classes are representative of EWM model portfolio, however EWM does not invest solely in the funds represented here, which are used for illustrative purposes only. Data provided by Dimensional Fund Advisors, and does not represent EWM model or actual client allocations.

Conclusion

The recent market turmoil and current economic woes have shaken confidence to the point where many investors struggle to stay focused on the long term (as evidenced by record mutual fund sales). We understand the disappointment you experience when your portfolio drops the way it has over the last fifteen months. Time will show that keeping “constancy of purpose” is the best way to assure participation in the inevitable recovery across the globe. The decisions we make as investors need to be based on long term (beyond a few years) expectations. Yes, the world is facing serious economic challenges and yes, it may take years to emerge. It is important to recall that the market is a forward looking mechanism and tends to rebound long before the economic data does. The process of developing capital markets expectations allows us to examine our decisions looking forward not backward. Based on our research, US large cap equities are likely to provide a premium over government bonds over the next ten years. Other equity asset classes may do even better. With this knowledge in hand, investors should be better prepared to take a consistent course of action to achieve their financial goals. We hope you have a wonderful 2009!

Sincerely,



The Empirical Wealth Management Team
 Kenneth R. Smith, CFP®, MS
 Chief Executive Officer