EMPIRICAL
WEALTH MANAGEMENT

February 19, 2009 **An Empirical Examination of Recessions**

Introduction

The enactment of a $787 billion stimulus package into law on February 17th provided little respite for a stock market that is flush with poor economic news and gloomy prospects. Minutes released from the Federal Open Market Committee (FOMC) meeting held at the end of January revealed that the group of policy makers believed a gradual recovery in the economy will not likely begin until the second half of 2009. In hindsight, it may seem apparent to investors that they should have reduced their exposure to stocks as the current financial crisis began to unfold. Additionally, investors may be considering reducing equity exposure now in hopes of avoiding further losses with the notion that they can always re-enter the market after the economy is back on track. We examined the last nine recessions occurring post 1950 to see if that would be a reasonable approach. Figure 2 provides the market returns experienced during each of the last nine recessions along with the returns experienced from each market bottom to six months after the official end of each recession. In every recession the market bottomed while the economy was still contracting. You may find the results to be counterintuitive; the data should give you serious pause if you are considering a retreat from equities at this point.

Markets Are Unpredictable – History Helps

History has shown that economists' future estimates often turn out to be wrong. This seems logical since we live in an uncertain world and economies are incredibly complex mechanisms driven by many forces. It should not surprise us if things turn around faster or slower than the 'experts' project. In fact, the surprise at the intensity and speed of this economic contraction felt by most policy makers, economists, market analysts and investors should serve as a reminder that it is difficult to predict the timing of booms and busts and their severity. It is prudent to accept their existence and focus investment strategy on long term policies that shield investors from the two most devastating forces faced during extremes: the emotions of fear and greed. For many, the battle to be fought right now is the fear of continued market declines and permanent loss of capital.

By knowing market history investors are able to gain perspective when they feel inclined to react to market news and the ever present quote 'this time is different.' It is true that the global economy is facing a crisis that has unique characteristics and we face serious challenges. This situation is historic in the specifics; not unprecedented in the context of economic and market setbacks. Many of the past financial downturns experienced were unique and severe up to that point in history. This past October we wrote a paper titled *An Empirical Examination of Market Volatility*, that letter covered market declines and recoveries in general.

Our advice to investors is to stay the course and participate in the global market recovery that will ensue; a recovery likely to begin prior to any official announcement that the economy has exited the current recession.

Definition of Recession

The National Bureau of Economic Research (NBER) does not define a recession as two consecutive quarters of GDP decline as is sometimes commonly stated. Rather the NBER defines a recession as follows:

A significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.

The NBER often does not make the announcement that the economy has entered or exited a recession until several months or years after the fact. For example, it was not clear to the experts until December of 2008 that the US economy entered a recession in December of 2007. The ending date of the last recession (November 2001) was not pinpointed until July 2003. There are valid reasons for the delay in making announcements as data takes time to compile and is often later revised. Knowing it is difficult to determine when we enter and exit recessions after the fact should give us an appreciation for how difficult it is to predict them in advance. We will see how helpful it would have been to adjust our portfolio during past recessions with the benefit of hindsight.

Analysis of Market Returns and Recessions

We looked at the last nine recessions that occurred post 1950 to get an idea of how the market reacted before, during and after each recession. Here are the dates and descriptions of the last nine recessions.

Figure 1:

Recessionary Period	*Contributing Factors to Recession*
July '53 – May '54	• Restrictive Federal Reserve policy • Expectation of post Korean War inflation- increased interest rates • GDP dropped - decline in investment – government spending
Aug '57 – April '58	• Worldwide recession • High unemployment – especially in auto • Government spending declined
April '60 – Feb '61	• High inflation • High unemployment- steel strike • Reduced demand for US exports
Dec '69 – Nov '70	• Reduction in government spending • High interest rates • High unemployment • Penn Central bankruptcy
Nov '73 – March '75	• Price of oil quadruples causing energy crisis • Watergate scandal • High government spending on Vietnam War
Jan '80 – July '80	• Iranian revolution prompted 1979 energy crisis • Oil price reaches all time high
July '81 – Nov '82	• Restrictive monetary policy adopted to combat inflation • Federal Reserve increased federal funds rate to 20%
July '90 – March '91	• Increased inflation, slowing of industrial production • Savings and Loan market experiences widespread scandal • Gulf War leads to high oil prices
March '01 – Nov '01	• Dot com bubble collapses • September 11th attack • Enron and Worldcom Scandals

Statistical Characteristics of Recessions and Stock Market Returns

Here are some observations from previous recessions (See Figure 2):

Stock Market Return Data

1.) Average stock market returns during recessions were 7.17% outperforming one month Treasury bills (a good cash substitute) that returned 5.49%. Five out of the nine recessions studied experienced positive returns throughout the recession.

2.) Average stock market returns from the bottom through six months after the end date of each recession were 35.90%.

3.) Average stock market returns six months prior to the start date of the recession were -0.44%. Five out of the nine recessions studied experienced negative returns leading into the recession.

Timing of Recession and Market Recovery

1.) The average recession length was around ten months with the longest recession lasting sixteen months and the shortest lasting six months. We are approaching fourteen months in the current recession.
2.) The market bottomed and began to recover, on average, five months before the official recession end dates. It is reasonable to expect the market to begin to rebound prior to the end of the current recession as well. If the FOMC was right about the recession ending in the second half of 2009, markets could begin rebound in short order.
3.) The NBER often does not pinpoint the end of recessions for six months to a year after the economy has emerged from one. Knowing this makes it clear that waiting for the official announcement date is costly.

Conclusions

The historical data is clear that it is impossible to predict when we will enter or exit a recession with precision. However, it appears that in the past, knowing would not have improved returns for market timers anyway. This is typically explained by the notion that the market is a forward looking mechanism reacting to unpredictable events. Though markets often begin to decline prior to the start of what later gets categorized as a recession, there are often false starts. This would explain why markets did not always decline before or during previous recessions.

While the past does not equal the future, it is encouraging to know that we have been through tough economic times before and that in each case; the market has emerged to afford investors positive returns. Market returns often come quickly and in large bursts before it is clear that we are out of the woods. It is likely that the market will bottom before the economic data shows a clear exit from this recession. It is imperative that investors do not get discouraged and exit the market before recovery begins.

This does not mean that stocks will not go down further from here. It is not clear how far the market will push stocks down in fear that the recovery will start later than the FOMC projects. Investors who are able to stay focused on their specific investment time horizon should not be shaken by the temporary setbacks. Markets tend to overshoot on both pessimistic news and positive news and do so in unpredictable ways. It is important, however, to realize that over the long run these excesses tend to reverse themselves. Fundamentally, markets provide returns commensurate with the long term growth in earnings and dividends paid. It is our belief that capitalism, innovation and the spirit of the entrepreneur will survive the current crisis.

Please let us know if you would like to review your investment strategy and personal objectives.

Sincerely,

Kenneth R. Smith

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

***Figure 2*:** Post 1950 Recession Data *(Recession dates provided by National Bureau of Economic Research. Recession returns provided by Standard and Poors, includes dividends. Post market bottom returns provided by Yahoo Finance, excludes dividends).*