



## How to Survive and Succeed Through a Bear Market

by John Montgomery

October 11, 2008 (Revised March 12, 2009)

*The opinions expressed in this letter are those of John Montgomery, Founder and Portfolio Manager, and are subject to change. This letter is not intended to provide specific investment advice.*

Note on March 12, 2009 Update

At the time of first writing this document last October, the market low ranked as the third steepest bear market since the Great Depression. Since then the market has set new lows. On March 9, the S&P 500 Index total return had declined 55.3% from the previous market high, qualifying it as the steepest bear market since the Great Depression. A new section 8 below considers some ways the current bear market is and is not like that of the Great Depression and presents some interesting statistics from that era. Continuing to focus on “time to recover,” rather than just magnitude of decline, I still feel the market is much more likely to recover in a period of a few years rather than the decade and a half of the Great Depression. This paper highlights the importance of investing in stocks for the long-term only, but also examines why Bridgeway believes stock market investing is still the best long-term investment.

Introduction

This is my fourth\* bear market as an investor, three of which have happened since I founded Bridgeway Capital Management in 1993. Even before the last three bear markets, I studied stock market data in detail going back to 1926. I spent quite a bit of time focusing on the downturns and thinking about how to survive them and why stock market investing is still very attractive even when predictably it doesn't feel that way. From this research I formed five principles of long-term investing that became part of Bridgeway's investment philosophy and are interwoven into our investment process. These are contained in sections 3, 4, 5, 7 and 9 below. Most of this applies to individual investors generally, and I thought I'd share what I learned with our investors. Some of the following discussion is a bit detailed and esoteric; if you're familiar with our shareholder letter format, you're familiar with the “short version” or summary, which follows:

### **THE SHORT VERSION**

**A bear market can be emotional and trying. In the current downturn it can be helpful to remember why we invest in stocks: inflation-beating growth *over the long haul*. Not quarterly, not annually, but in a majority of five year periods and the vast majority of ten year periods. For money you do need to invest over the long haul—e.g. college savings, retirement, or simply money you don't plan to spend any time soon—the alternatives, *especially* the ones we tend to think of as most “safe,” can bear tremendous risk of inflation, which is one of the worst kinds of risks for fixed income investments (CD's, money markets, treasuries, and bonds). Although no one likes the big**

*\*I include the “small value” bear market of 1998, also known as the “Asian flu,” as one of my bear markets, because it affected Bridgeway and my personal portfolio so significantly. From the peak to the low on October 5th, Bridgeway Ultra-Small Company Fund declined 49%. The Fund did return to its former peak in 16 months.*

declines or roller coaster rides of a stock market bear, the alternatives can actually be much worse for your long term financial health, based on a lot of data over many years. This is the reason Bridgeway is a proponent of stock market investing for money you plan to spend at least five years, but preferably ten or more years, into the future.

During a bear market, people focus mostly on the magnitude of decline, because this is where the media focuses, and it is the only indicator financial journalists can report on a daily or even minute to minute basis. It fills their need to attract your attention on a frequent basis. Unfortunately, this is highly unproductive for you, increases stress, and may lead you to “buy high, sell low,” a formula for financial disaster over the long haul. In fact, it only takes one of these bear market missteps (trying unsuccessfully to sell in anticipation of avoiding some of the “carnage”) in an investing lifetime to put a significant dent in your long term financial picture. By comparison, if you look at a long term graph of a stock market index, the bear markets become relatively small “blips,” not nearly the big deal they feel like at the time.

Rather than focusing on magnitude of decline, I recommend focusing in a bear market on the length of time it takes to get back to the previous peak. Historically since 1940, from the bear market “low” point or “trough” over eight bear markets, it has taken from two to 48 months to return to the previous high, or 19 months on average. For the more severe bear markets (greater than 30% declines), the average has been 25 months, or just longer than two years. I’m planning to wait. Actually, I’m cutting back my expenses some so I can afford to invest more while stock prices are lower. (But if I had too much debt or didn’t have an emergency fund, I’d consider funding these needs first.)

### Why stock market investing at all?

1. **What are the *advantages of stock market investing*?** A good place to start is to remember why we invest in the stock market to begin with: financial growth over the long haul significantly above inflation over the long haul. Few decisions in life can be based on so much data over so many years—strong data in the modern era, and decent data going back roughly two centuries. Especially because of the big disadvantages of the alternatives (item two below), the stock market is one of the true potential growth vehicles available to the average American. How much growth? Based on the last eight decades of data, including the Great Depression and ten bear markets (declines of at least 20%), about 7% per year above inflation. Clearly, it can be a lot more or less in any one year, but over long periods of time, it’s more consistent than you might expect. In periods when growth varies significantly up or down, the following periods have tended to bring it back in line, something statisticians call “reversion to the mean.”

2. **What are the *alternatives to the stock market*?** The obvious disadvantage to the stock market is that you have to be willing to put up with the roller coaster ride of a bear market. In saving and investing, however, there is no free lunch. Where else can you go? Money markets and CD’s have historically provided for secure principal. To the degree you use short-term Treasuries, they are essentially the “risk-free rate.” This is a bit misleading, however. The very major risk they are susceptible to is inflation risk. Even 90-day Treasuries with interest reinvested declined 41% in purchase power from 1940 to 1950. The nominal principal never declined, but what you could actually buy with it declined dramatically. Other inflationary periods, such as 1979-80, were similarly very hard on these kinds of investments. Unlike stocks, once inflation eats away at them, money markets and CD’s don’t typically “come back,” according to historical data—a big disadvantage relative to stock market investments. In this important

way, fixed income instruments are more like Vegas gambling than the stock market. When inflation takes a bite out of your fixed income, typically it's gone. If you own stock in a company and inflation ignites, that's bad for the company in the short run, but the company will typically raise the prices of its products or services, and the stock price should eventually follow suit.

What about long-term bonds? They are similar to CD's and money market instruments in that they bear significant inflation risk, but they also bear substantial interest rate risk; when interest rates go up, the total return of long-term bonds goes down. So, for example, an index of long-term government bonds declined in market value more than 8% all in one month in 1979. Long-term bonds had negative total returns in 8 of the last 30 years (even *before* the effects of inflation). In return for this level of additional volatility, all you get is another percent or percent and a half or so of annual return over the long haul, based on history. Municipal bonds, of course, earn tax-free income but a lower total rate of income before taxes; but they have roughly the same large inflation risk. Personally, I'm not a fan of long-term bonds because I think the additional historical return is too meager for the amount of additional risk one has to accept. For this reason I prefer short-term bonds for a portion of your savings that are short term in nature, that is, for money that you might need in the short term.

So I don't like fixed income instruments for money an investor plans to hold for long periods of time. An exception is Treasury inflation protected bonds (TIPs), which reasonably shield one from the potentially devastating effects of inflation. The disadvantage here is that to get this protection against inflation, you expect to earn less than a normal Treasury. Still, when you have a mid-term investment need and don't want to be in the stock market, this is one instrument I like, but with some moderation; that is, I think it's an appropriate part of a portfolio of savings that is short- to mid-term in nature (say 2-5 years) or with an emergency fund you plan to hold longer term. In absolute terms, TIPs also have some variation and can be negative. Last year, mid-term TIPs returned something over 10% (not realistically sustainable). So far this year they are one or two percentage points under water, but are still performing their function.

Gold. Over the long haul, gold has been a horrible investment. I think its fine for jewelry or if you just like to collect coins, or if you think the U.S. Government is going completely out of business. However, as an investment, don't expect much. One of my early lessons in investments before actually researching asset class returns was purchasing gold in 1980 near the peak, approaching \$700/ounce. Fortunately, it was a very small purchase. Adjusted for inflation, the price of gold hasn't come close to recovering in the nearly three decades since.

Real estate. I'm a supporter of home ownership, but only if you can put a significant amount of money down, have a fixed rate mortgage, and can well afford the total costs of home ownership (taxes, insurance, upkeep, as well as the mortgage). No or little money down and variable rate mortgages have gotten many people into trouble recently and that may still get worse. Apart from responsible home ownership, and perhaps modest amounts of student loans, I am not an advocate for debt in general.

Other diversifying assets. Some other assets are probably ok as diversification in smaller amounts. These include ultra-small companies, foreign companies, and, especially in smaller doses, commodities (if you can invest without derivatives).

**3. *Conclusions from studying history: match your investment time horizon (when you will actually spend the money) with the kind of investment—mostly stocks for the long term, mostly short-term fixed income for the short term.***

Putting item one together with item two, I conclude that the stock market is a good place for long-term money, a) because of long-term historical growth numbers, b) because it's a good way to combat inflation over the long haul, and c) because the alternatives are so poor for the average investor. In the short term, however, stocks are too risky, and I favor short-term bonds, shorter-term inflation protected bonds, and CD's/money market accounts. I'm not generally a proponent of debt. I am a big proponent of having an emergency fund for a rainy day.

#### **Asset allocation in a bear market.**

4. ***Asset allocation: it's the same principle in any market.*** I follow a reasonably "static" asset allocation over time, which forces me to invest more money in the Bridgeway managed funds that have recently done the poorest. I like "dollar cost averaging," which ensures you buy more shares when the share price is low. These contrarian principles have served me well over time. Bridgeway's advice on asset allocation does not vary with market environment. We recommend: getting an asset allocation plan, writing it down, and implementing it methodically, including and especially when it feels least comfortable to do so. The mistake I see so many investors make is investing in what has done best recently and taking money out of what has done poorly—typically for emotional reasons. This strategy can generally be translated as "buy high, sell low," and is a formula for significantly lagging returns, if not for financial disaster over the long haul.

5. ***Not timing the market.*** Surely, you could make more money over the long haul if you could sidestep the downturns, or even a piece of the downturns. This is an attractive concept into which I put quite a bit of research time in 1992. My conclusion: there's a big problem. You have to make two heroic calls, not just one. Some of the people who made a great (lucky?) call entering the bear market of 1987 waited too long to get back in and still came out behind. After coming up with my own strategies and studying the strategy of as many others as I could get my hands on, I concluded that trying to time the market was a colossal way to destroy value over time, not to mention increase costs and hurt tax efficiency. It's a big losing game. I adopted one of the mottos I ran into during this period: "time *in* the market is much better than tim-*ing* the market." This is all the more true when it feels the least comfortable to do so, during a bear market such as now.

#### **Focusing on time instead of magnitude.**

##### ***6. How bad is the current bear market relative to previous ones?***

People invariably focus on the magnitude of the downturn in a bear market. This is really unfortunate, because it magnifies our stress and worry, pushes us in the direction of "buying high" and "selling low" as described above, and keeps us glued to television screens and stock monitors instead of engaging in more productive activities. If you have a well thought out, diversified plan before a downturn, you shouldn't need the money for some years hence and you should not need to look frequently now. Three out of any ten years in the stock market have been negative. Sometimes it looks ugly. That's the "nature of the beast." OK, but human nature is to look, so let's put the current bear market in perspective:

Date of Peak	Date of Low	Magnitude of Decline
May 31, 1946	Oct 9, 1946	-25.5%
Dec 12, 1961	Jun 26, 1962	-26.9%
Feb 9, 1966	Oct 7, 1966	-20.4%
Nov 29, 1968	May 26, 1970	-33.1%
Jan 11, 1973	Oct 4, 1974	-44.8%
Nov 28, 1980	Aug 12, 1982	-20.2%
Aug 25, 1987	Oct 19, 1987	-32.9%
Sep 1, 2000	Oct 9, 2002	-47.5%
Oct 9, 2007	Mar 9, 2009 - ??	-55.3%
<b>Average (excluding current)</b>		<b>-31.4%</b>

There have been nine bear markets since 1940 with declines of at least 20% (based on the total return of the S&P Composite Index of large stocks). As of the updated writing of this letter, the current one ranks #1. It's bad, so what does that mean? Assuming that you have overall long term faith in the U.S. economy (I do), this is a buying opportunity. If however, you need the money before the market is able to recover, it can be a very significant problem, one that goes beyond the scope of this letter (however, see section 9), but one which further underscores the importance of not putting short-term money in the stock market.

### 7. *Focusing on time instead of magnitude.*

One interesting and powerful measure of risk is what I call "time to recover." This is the time from a previous market "high" (or "previous peak") until it reaches that level again. These numbers are much more comforting than the magnitude of decline and worthy of studying:

Date of Peak	Date of Low	Date Back to Previous Peak	Peak Rate of Unemployment	# of Months from Peak to Low	# of Months from Low to Prev. Level
May 31, 1946	Oct 9, 1946	Oct 11, 1949	7.9%	5	36
Dec 12, 1961	Jun 26, 1962	Apr 24, 1963	6.0%	6	10
Feb 9, 1966	Oct 7, 1966	Mar 23, 1967	3.9%	8	5
Nov 29, 1968	May 26, 1970	Mar 15, 1971	4.4%	18	10
Jan 11, 1973	Oct 4, 1974	July 9, 1976	9.0%	21	21
Nov 28, 1980	Aug 12, 1982	Oct 7, 1982	10.4%	21	2
Aug 25, 1987	Oct 19, 1987	May 17, 1989	6.0%	2	19
Sep 1, 2000	Oct 9, 2002	Oct 23, 2006	6.3%	25	48
Oct 9, 2007	Mar 9, 2009 - ??	NA	8.2%++	17 - ??	??
<b>Average (excluding current)</b>				<b>13</b>	<b>19</b>

Looking at the same nine bear markets as in the previous section, the range of times from the previous peak to the trough (or "low") has been from 2 to 25 months, or 13 months on average. In the current bear market, it has already been 17 months since the last peak and there is no way to know if it will last longer. The range of times from the trough back up to the level of the previous peak has been from 2 to 48 months, or 19 months on average. Could it take longer? Yes, the Great Depression took quite a bit longer as covered in section 8, but the economy was in much worse condition than currently, and the

Federal Reserve and U.S. Government knew a lot less about how to manage it. From the perspective of history, there are several “lessons”:

- Don’t think you can time the downturn. It can come roaring back very quickly and you’d miss an opportunity to stay invested. Or it can take quite a while, but has usually come back within a few years.
- Don’t “leverage” or borrow at this time (or any time), especially “on margin” (or against your investments). In that case you may not be able to afford to “stick it out” if the downturn goes lower and lasts longer.
- From the perspective of time, it doesn’t seem so scary. It just takes patience, sticking to your plan, and . . . some time.

We don’t know if we have reached the low point (trough) yet. Historically, Bridgeway’s more aggressive Funds have bounced back faster than the market, but we only have two data points with a decline as steep as the current one: Ultra-Small Company Fund in 1998 and Aggressive Investors 1 Fund from 2000 to 2002. In the first case, Ultra-Small Company fell 49%, which was farther than its market index over a very fast 5 month period in 1998, but recovered in a relatively short 16 months to the previous peak, faster than its market benchmark. In the second case (2000-2002), the S&P 500 was 25 months from peak to trough and 49 months from trough to previous peak. Our Aggressive Investors 1 Fund was 30 months from peak to trough and a relatively short 22 months from trough to the level of the previous peak. Past returns do not guarantee future performance. Which is better, a less severe decline or a quicker recovery? People feel the magnitude of the fall. But if this is really long-term investing, is the time to recovery a better measure of risk?

### ***8. A look at the Great Depression***

At the time of the original writing of this paper, the current bear market ranked #3 in terms of magnitude of decline among bear markets since the Great Depression. Since both the economy and the stock market have recently further deteriorated, we thought it would be appropriate to look at actual data from the Great Depression. Is the current bear market more like recent bear markets of the last seven decades, or could it be more like the truly severe one of the Great Depression, lasting significantly longer than a few years?

Of course, we can only know the answer to this question for sure in hindsight, after a full recovery at some point in the future. A few statistics from the era of the Great Depression may shed light on the current situation, however. First of all, by next month this will be the longest running recession since the Great Depression. Second, it is the second longest running bear market, and also the deepest one. Third, some economists have pointed out that this recession is like the Great Depression in that it was led by a collapse of parts of the financial system itself. On the other hand—and I find this significantly more compelling—current unemployment rates, while very high by comparison to rates of the last seven decades, are nowhere near the 25% peak unemployment rate experienced during the Great Depression. Personally, I would be shocked if the U.S. unemployment rate doesn’t peak at something over 10%. It is currently very painful for a lot of people, and it seems extremely likely this will get worse. However, I would be equally shocked if unemployment peaked above 15%. Thus, from my current perspective, the

current bear market is still much more like the last seven bear markets than the Great Depression of the 1930's. But let's look a bit farther, focusing on the same data points as above.

The S&P 500 Composite Index declined 85% over 33 months, from the peak in September 1929 to the bottom in June 1932. For the same reasons I don't expect unemployment to get anywhere near the 25% peak of the Great Depression, I also don't expect the magnitude of decline to reach nearly this level. Focusing on the time to recover rather than the magnitude of decline, it took 12 1/2 years to recover from the bottom in 1932 back to the levels of the previous high (1945). This may be a bit misleading, however, since an interim peak in early 1937 was only 15% below the 1929 peak, a much shorter time period. Some indexes had completely recovered by 1937. For example, according to data from Ibbotson (Stocks, Bonds, Bills and Inflation), small stocks—we would call them micro-cap stocks—completely recovered to their November 1928 peak in January 1937, an eight year period from peak to peak. Personally, I'm also prepared to wait that long, though I still believe that the Great Depression is an "outlier" data point.

### **Bigger weapon to fight off a bear market**

#### ***9. So if one really is planning to hold through the downturn, is there literally nothing to do?***

Let's say you really are a long-term investor in the stock market and are willing to wait out the current downturn. Is there nothing to do to improve your eventual net worth when things eventually do recover? Absolutely: you don't have to sit on your hands.

The most powerful weapon at your disposal, while awaiting a recovery, is your expense level. Say you could save an additional 10% by cutting back in certain areas of your budget. If you were to invest those savings, I call this "super dollar cost averaging." Because you do it when the market is down, these dollars buy more shares (than previously), and can more significantly boost your long term wealth whenever the market does eventually recover. My wife and I are practicing this currently, cutting some expenses and saving and investing more. If you have found that you made a mistake in your asset allocation - for example, you didn't take money out of the stock market that you need in the next handful of years - this method also works to replenish your finances at a faster rate. Interestingly, this approach works even for retired people on a fixed income, assuming that they have some "variable" portion of their expenses. (We all do to at least some extent.)

Should you take on the practice of super dollar cost averaging, I have one other suggestion. Some years ago a retired friend of mine found that he was spending too much of his nest egg, and I strongly encouraged him to cut back his spending. A year later he called me back and told me something surprising. He said, "John, I had increasing fun as my expense budget was going up over the previous years, but I found that when I was more responsible in my spending over the last year, I had even more fun on less money, investing my time better, slowing down a bit, and investing in relationships." I thought his experience was a remarkable one; as I cut some expenses to save and invest more in the current market, I'm going to seek the same outcome as my friend.

I hope some of these insights are helpful to you in this potentially stressful market.

Sincerely,

John Montgomery



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AP 2009/05/2809