O'Shaughnessy ASSET MANAGEMENT

The Same Old Bear: A Study of Bear Markets and Stock Returns Since 1926

BY PATRICK O'SHAUGHNESSY, CFA: JANUARY 4, 2010

"THE ERROR OF OPTIMISM DIES IN THE CRISIS, BUT IN DYING IT GIVES BIRTH TO AN ERROR OF PESSIMISM. THIS NEW ERROR IS BORN, NOT AN INFANT, BUT A GIANT."
ARTHUR CECIL PIGOU

In the field of behavioral finance, there is a phenomenon called "barn door closing". It describes the tendency of market participants to do today what would have worked yesterday—or last month, or last year. The best current example is the massive flight to perceived "low-risk" or "riskless" assets (bonds and treasuries), which fared very well during the market slide of October 2007 through March 2009, but which now have bloated prices and rather dim prospects. Yields on T-Bills are essentially zero and the 10-year note yields 3.7 percent—both far below long term averages.

Lately, a very common request is an investment vehicle that is hyper-sensitive to (and avoidant of) downside risk, even at the expense of a considerable upside opportunity. Undoubtedly, this desire was precipitated by a decade during which investors were stung—not once, but twice—by severe bear markets. The only other decade that stocks suffered such declines (losses exceeding 40 percent) was the 1930s. Pessimism has clearly been born a giant in the aftermath of the credit crisis. Even now, with a market 63 percent above its March lows, fund flows in 2009 indicate that the investing public is still terrified of stocks and enamored with "low-risk" assets like bonds and treasuries. Year-to-date (12/16/09), U.S. equity funds have seen outflows of $22.8 billion dollars, while $330 billion has poured into U.S. Bond Funds, a trend which has only become more pronounced towards the end of the year.[1] In the ever-shifting risk tolerance of the investing public, it is clear that right now investors would rather sleep well than eat well. This surge into fixed income comes at the end of a 25 year period where bonds have beaten stocks in the trailing one-, two-, five-, ten-, 15-, 20-, and 25-year periods.[2] Even a cursory glance at history would inform these investors that the worst time to invest in an asset class is when it has had such a long run of strong relative returns. It is very likely that bond investors are positioned at the wrong end of a powerful mean reverting cycle. At current prices bonds and treasuries seem to us more likely to offer "return-free risk" rather than downside portfolio protection.

Of course, the best investment policy is one that looks forward not backwards, but this does not stop investors from systematically making market-timing errors. In a famous study conducted by Dalbar, in the 20-year period of fund flows analyzed, market timing stock fund investors lost an average of 3.29 percent per year while the average investor gained just 3.51 percent. Compared to a market that compounded at 12.98 percent in the same period, these investors were extremely unsuccessful.

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Our opinion of stocks versus bonds has been very clear cut all year—in earlier commentaries beginning in January 2009,* we have outlined why 2009 was a once-in-a-generation opportunity to buy stocks and why investors making large allocation shifts away from equities and towards bonds are likely making a very costly mistake.

We are fortunate to have access to additional market data that helps put the recent stock market into historical perspective. The purpose of this study is to analyze what types of stocks do well at various points surrounding bear market declines in the U.S. since 1926.

Since we are sitting at tail end of a severe bear market, the most pertinent portion of this study is what types of stocks perform well for the one- to three-year period following bear markets. For an investor trying to build a portfolio with good downside protection without sacrificing upside potential, the behavior of various types of stocks following bear markets is interesting and important information to understand.

[1] The Leuthold Group
[2] S&P 500 vs. Long-Term Government Bonds, monthly returns from Ibbotson Associates
[3] www.dalbar.com
* See www.osam.com/commentary.php

This paper will begin by outlining the nine U.S. bear markets since 1926 and discuss what sorts of stocks performed well during and after those markets.

During the nearly nine months since the March 9th market bottom, market trends have closely mirrored those of other severe bear markets. If history continues to repeat itself, the lessons from this study could prove to be extremely valuable for the next two years.

Bear Markets Since 1926: A Review

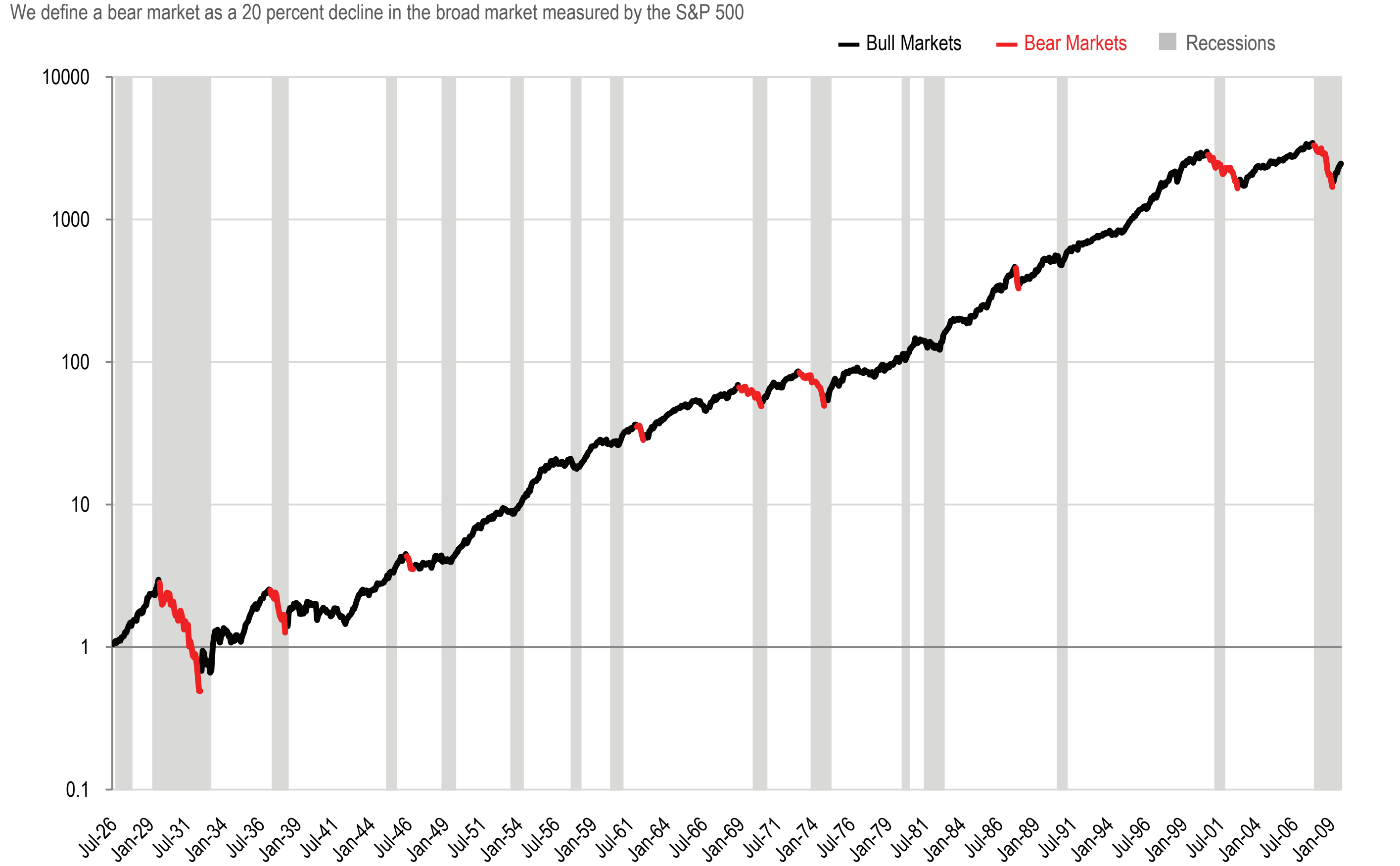
To measure market declines, we use the S&P 500 composite monthly return series from Ibbotson and Associates. While there is no universally accepted definition of a bear market, we use the common requirement of a 20 percent decline in the broad market, measured by the S&P 500. The nine bear markets that have occurred since the 1920s had very different causes and circumstances. Some were necessary corrections of bloated earnings multiples (1929, 1962, 1973, 2000). Some were driven in large part by pervasive negative market sentiment (1946, 1987, 2007). Others were driven by concerns over war, interest rates and falling economic production (1937, 1968). Most cannot be distilled down to a singular cause but rather were caused by a cocktail of psycho-logical, economic, and technical issues.

Another key lesson is that economic contraction is not always met with a corresponding bear market. In the same period as our nine bear markets, there have been 15 recessions, as defined by the National Bureau of Economic Research (NBER).[4] Very often the movements of the stock market are lowly correlated with GDP growth, unemployment, and other economic variables.

Five of the nine bear markets—including the last two—we classify as severe bear markets, meaning the market declined by 40 percent or more. Having just lived through two severe bear declines in the past decade, we pay special attention to severe markets in an effort to understand what the next several years may hold. A brief review of the circumstances surrounding each gives us a good starting point for understanding the types of stocks which perform well at various stages during bear markets and subsequent recoveries.

[4] www.nber.org

Figure 1: S&P 500 Index During Bull Markets & Bear Markets (July 1926–September 2009)
We define a bear market as a 20 percent decline in the broad market measured by the S&P 500



Bear Markets Since 1926: A Review (continued)

Bear market of 1929:
<u>Severe</u> Bear (34 months, -83.41%)

By the end of the summer in 1929, the stock market, speculative hunger, and PE ratios were at long time highs. Sentiment was also frothy—cars were more affordable than ever, the radio was destined for every American household and commercial airliners were growing rapidly. Just the idea of talking motion pictures sent Warner Brothers Pictures stock up 80 percent in 19 months! Many companies like Alcoa, National City and Chase Bank had PE's between 40–100×. The resultant crash of 1929 and ensuing Great Depression was (and remains) unprecedented in magnitude and duration. By the time it ultimately hit bottom in June of 1932, the S&P 500 had lost more than 83 percent of its value.

Bear market of 1937:
<u>Severe</u> Bear (13 months, -50.54%)

Following five years of very strong returns, the market returned to severe bear territory with the second major sell off of the decade. As Japan invaded China, stocks stumbled through the summer of 1937 before taking a serious turn for the worse. The market panic in September began an economic and market meltdown, much to the surprise of New Deal economists. Industrial production actually fell faster than it had in 1930. Between August and December, output capacity in the steel industry fell from 82 percent to 20 percent—a swift and brutal decline. Very quickly unemployment increased by two million people and approached 20 percent—the highs for the decade. Demand for key American goods—steel, autos, tools and other factory products—evaporated in the fall of 1937. The decline culminated in March of 1938 when Hitler marched into Austria and the S&P 500 fell 25 percent. The market downturn lasted just a year but erased half of the value of the S&P 500.

Bear market of 1946:
Moderate Bear (6 months, -21.76%)

The six-month bear market beginning June of 1946 was one of few bear markets not accompanied by soaring PE ratios. Instead, the dominant fear was that the war would end in a depression (as most wars had in the past) and falling output led a short-lived market panic where the S&P 500 dipped roughly 22 percent. This market was one of the best times in history for value-oriented stock investors. Famous value managers like Ben Graham recognized that many companies were trading at prices well below the book value of the company. As *Life* magazine opined at the time, "the stock market surpasses all understanding…stocks are worth more dead than alive."

Bear market of 1962:
Moderate Bear (6 months, -22.28%)

Once again through 1961, PE levels rose to unsustainable levels, with familiar culprits like IBM and Polaroid selling for between 80–100× earnings. The actual market collapse, which lasted just six months, was precipitated by President Kennedy's quarrel with the heads of the steel industry over price controls. Kennedy wanted steel prices to remain where they were for fear that the 3.5 percent increase in prices put forth by the steel giants would set off a round of inflation. Under pressure from the Kennedy administration, the steel companies rescinded the price hike, but the perception that Kennedy was anti-business grew. This kicked off a rapid 22 percent decline in prices.

Bear market of 1968:
Moderate Bear (19 months, -29.23%)

Frustrations associated with the war in Vietnam, surging interest rates and inflation drove this 19-month bear market. Adding to the malaise in the first half of 1970 were record trade and budget deficits, a mail strike, inflation, the invasion of Cambodia, and the Kent State massacre. It was also exasperated by LBJ's famous statement that he could pay for both guns and butter, referring to many of the recently added entitlement programs.

Bear market of 1973:
<u>Severe</u> Bear (21 months, -42.62%)

This bear market busted the inflated expectations and PE multiples of the "Nifty Fifty," a group of 50 popular growth stocks which led the previous bull market. IBM, one of the nifty fifty, had a PE of 40×, but the huge bear correction drove it down to just 12× the following year. To make matters worse, the dollar was performing very poorly following America's abandonment of the gold standard in 1971, the Nixon administration was mired in the Water-gate scandal, and prices continued to decline through September of 1974. This was the worst market downturn since the Great Depression.

Bear market of 1987:
Moderate Bear (3 months, -29.53%)

Explanations for the stock market crash on Black Monday include illiquidity, human psychology (panic selling), high valuation levels, and program trading, which created a cascading downward effect without any buyers. After much analysis, no

Bear Markets Since 1926: A Review (continued)

single factor has ever emerged as the central cause of the crash. Instead, most historians point to many different factors working in concert. The impact was felt in stock markets around the world. The worst hit was Australia, losing 58 percent of its value. Hong Kong, Singapore and Mexico also suffered percentage declines well in excess of the U.S. Stock market. The crash was not at all coincident with an economic recession, and lasted just three months. Unlike the recent panic, there were no major bank collapses.

Bear market of 2000:
Severe Bear (25 months, -44.73%)

Irrational exuberance drove prices to soaring heights in March of 2000, with seemingly no regard for economic fundamentals. In April 1999, Jim O'Shaughnessy wrote the following regarding the valuation insanity:

> "Ultimately, a stock's price must be tied to the future cash payments a company will make to you as an owner. History shows us that the more you pay for each dollar of a company's revenue, the lower your total return. It does this because it has to—that's why economics is called 'the dismal science.'
>
> Because the numbers ultimately have to make sense, the majority of all currently public Internet companies are predestined to the ash heap of history. And even if we could see the future and identify the ultimate winner in e-commerce, at today's valuations it is probably already over-priced. When people realize that the mania has dried up, and that 'the greater fool' isn't there anymore, they'll all rush for the exits at the same time. And the same thing that drove Internet prices up—lack of liquidity married to irrational investors—will drive them down, only more quickly."

While the market decline was one of the greatest in history, the broad economic recession was quite tame and many non-technology stocks weathered the storm while the NASDAQ plummeted more than 70 percent.

Bear market of 2007:
Severe Bear (16 months, -50.95%)

The effects of the sub-prime mortgage/credit crisis and the resultant financial meltdown reverberated around the world. All major stock markets were hit—and hit hard, leaving equity investors wounded and questioning their commitment to stocks for the long run. The combination of lax governmental policy encouraging home ownership at virtually any cost and market participants taking exotic instruments to extreme levels using unsustainable amounts of leverage, the recent severe bear market became the second worst decline since the 1929 crash. It also contributed to the fact that this will be the worst decade for stocks (when priced in real, or inflation adjusted terms) in 110 years.

The Best Performing Stocks During—and After—Bear Markets

While the particulars of each bear market are very different, the types of stocks that perform well at various stages surrounding the declines are somewhat consistent around all bear markets and quite consistent around severe bear markets. If history rhymes yet again, these lessons should prove valuable over the next several years.

Data

All data for this study comes from the CRSP[5] database, which covers price, dividend, share and book value data for U.S. listed stocks back to 1926. For this study, our data series begin in July 1926 and ran through September 2009. We consider only those stocks that have an inflation adjusted market cap of $200 million or more, which creates a proxy for liquidity.

Return Series and Factors

Since 1996, OSAM has managed money based on the original research for *What Works on Wall Street*. Jim O'Shaughnessy discovered that there are certain characteristics of stocks, both technical and fundamental, which are indicative of future stock returns. For this latest study we focus on four key individual factors and a simple multifactor model. The single factors analyzed are six month momentum, book-to-price, dividend yield and shareholder yield (dividend yield plus buyback yield). The multifactor model, which is a combination of strong book-to-price, shareholder yield and stock price momentum, has higher returns and lower volatility than any individual factor.

We use these four individual factors for two reasons. First, each of these factors were found to be very predictive of future returns in the research for *What Works on Wall Street*, and all of these factors play a major role in our stock selection strategies at O'Shaughnessy Asset Management. Second, the CRSP database allows us to test these factors back to 1926, which includes valuable bear markets—including the Great Depression—which we cannot study using the Compustat database alone. We use book-to-price even though our earlier research has shown price-to-sales to be a more effective measure of value. This is because CRSP covers book value, but not sales.

Because market capitalization is also relevant to future stock returns—small cap stocks outperform large cap in the

[5] Center for Research in Security Prices (www.crsp.com)

long run—we also include four broad stock universes, S&P 500,[6] All Stocks,[7] Large Stocks,[8] and Small Stocks.[9]

Within our All Stock Universe, we consider the top and bottom decile by each factor to see how they behave during and after bear markets. In the long run, stocks with high book-to-price, high dividend yields, high shareholder yields, and strong recent momentum outperform those with low book-to-price, no dividend yield, low shareholder yields and low momentum (see Table 1 below). Several of these relationships are inverted during and after bear markets, as we have seen in the past two years. Luckily, if this recovery follows a similar trajectory as those following other severe bear markets, stock selection strategies based on our factors have very bright days ahead.

Table 1: July 1926 – September 2009	S&P 500 Index	All Stocks Universe	Large Stocks Universe	Small Stocks Universe	All Stocks Universe: Book-to-Price (B/P) Worst Decile	Book-to-Price (B/P) Best Decile	6-Month Momentum (6MM) Worst Decile	6-Month Momentum (6MM) Best Decile	Shareholder Yield (SH Yield) Worst Decile	Shareholder Yield (SH Yield) Best Decile	Dividend Yield Best Decile	B/P + SH Yield > Median, 25 Best 6MM
Return (%)	9.84	10.46	10.00	11.02	8.03	11.38	4.10	14.15	6.02	13.11	11.82	15.89
Volatility (%)	19.24	21.61	19.78	23.67	23.20	29.22	29.19	24.46	25.76	20.20	20.10	20.94

During the Decline

Given the severity of many of these declines, it is no surprise that investors are typically scared to own stocks for extended periods following major downturns. The most valuable information about bear market declines would be which stocks, or factors, provide consistent protection on the downside. The results for our four primary factors are somewhat mixed (see Table 2 below). Unfortunately there is no single factor that always provides downside protection.

Companies with high dividend yields and high shareholder yields provide the best odds of outperforming on the way down, but there are bear markets where those stocks underperform. Neither momentum nor book-to-price provides consistent protection on the downside. There are several bear markets where both significantly underperform the overall market.

Our multifactor model does well versus the market during the downturns. In seven of the nine bear markets the multi-factor model beats the All Stocks Universe by an average of 7.3 percent.

This evidence suggests that in most instances, equity owners can run but they cannot hide. Focusing on companies with high yields is the best bet to protect a portfolio from future bear markets even though this approach failed in the most recent severe bear market. Using multifactor models appears to provide even stronger downside protection, although there are instances (including the most recent bear) where our model underperforms.

Table 2: Returns During the Decline (%) — Bear market* beginning:	S&P 500 Index	All Stocks Universe	Large Stocks Universe	Small Stocks Universe	All Stocks Universe: Book-to-Price (B/P) Worst Decile	Book-to-Price (B/P) Best Decile	6-Month Momentum (6MM) Worst Decile	6-Month Momentum (6MM) Best Decile	Shareholder Yield (SH Yield) Worst Decile	Shareholder Yield (SH Yield) Best Decile	Dividend Yield Best Decile	B/P + SH Yield > Median, 25 Best 6MM
9/1/1929	-83.41	-85.45	-84.72	-86.55	-83.17	-91.80	-91.58	-77.90	-88.21	-88.42	-89.58	-82.07
3/1/1937	-50.04	-53.93	-48.10	-57.51	-47.90	-72.32	-58.10	-58.37	-55.37	-53.75	-53.21	-54.73
6/1/1946	-21.76	-25.46	-21.15	-27.77	-23.90	-28.87	-28.79	-28.98	-30.48	-23.90	-24.06	-23.20
1/1/1962	-22.28	-23.91	-23.04	-24.27	-38.05	-18.35	-29.80	-26.71	-29.42	-17.04	-15.63	-19.20
12/1/1968	-29.23	-44.99	-34.02	-49.66	-43.97	-45.72	-59.39	-47.38	-61.02	-29.81	-29.62	-40.41
1/1/1973	-42.62	-49.87	-46.11	-52.45	-62.37	-29.63	-64.40	-43.39	-58.86	-30.20	-27.21	-26.88
9/1/1987	-29.53	-32.40	-30.06	-34.31	-37.75	-30.50	-35.22	-34.46	-36.63	-26.37	-14.84	-29.34
9/1/2000	-44.73	-36.28	-39.43	-34.85	-66.32	-19.65	-71.00	-48.95	-59.79	13.46	12.52	-7.49
11/1/2007	-50.95	-55.41	-53.26	-56.31	-57.58	-66.07	-64.84	-62.44	-64.68	-53.71	-61.19	-59.02
Overall Average	**-41.62**	**-45.30**	**-42.21**	**-47.08**	**-51.22**	**-44.77**	**-55.90**	**-47.62**	**-53.83**	**-34.42**	**-33.65**	**-38.04**
Severe Bear Average	**-54.35**	**-56.19**	**-54.32**	**-57.53**	**-63.47**	**-55.90**	**-69.98**	**-58.21**	**-65.38**	**-42.53**	**-43.73**	**-46.04**

* Shaded rows denote severe bear markets — the market declined by 40 percent or more.

6 From Ibbotson and Associates 7 All U.S. Listed stocks in the CRSP database with an inflation adjusted market cap > $200 Million

8 All U.S. Listed stocks in the CRSP database with a market cap > All Stock average 9 All U.S. Listed stocks in the CRSP database with a market cap < All Stock average

First Year of Recovery

During the first twelve months following bear market bottoms, stock returns are polarizing. Not surprisingly the return of the overall market is very strong coming off the bottom—the S&P 500 bounced by an average of 45.6 percent following all bear markets and 61.27 percent following severe bear markets. There are, however, huge divergences in performance for different types of stocks. The relative performance of our factors reveals some very interesting trends. In the first year following bear market bottoms, high book-to-price stocks were extremely strong performers while stocks with high shareholder yields performed relatively in line with the overall market.

The most consistent trend is one of momentum inversion following bear market bottoms—the same phenomenon which has led to significant underperformance of our growth strategies at O'Shaughnessy Asset Management and trend-following strategies in general in 2009. While high-momentum stocks do extremely well in the long run, they are generally crushed by weak momentum stocks, and the overall market, in the first year following severe bear markets. During every initial rebound, the stocks that had lost the most of their value bounce back with intensity, by an average of 119 percent. This is exactly what we have seen in 2009. Stocks that had been priced for extinction on March 9, 2009 have since returned roughly 250 percent[10] on average. Meanwhile, stock selection strategies that buy based on trailing momentum have performed very poorly because the stocks that had done well leading into market bottoms have weak relative returns during the first year of recovery.

While the raw return of the multi-factor model is usually strong during the first year of recovery, the model does poorly relative to All Stocks, as have many of our multi-factor models at O'Shaughnessy Asset Management thus far this year. The multi-factor model underperforms in the first year following all five severe bear markets, by an average of 9 percent. This data also explains the dichotomy of our value strategies (O'Shaughnessy Enhanced Dividend, O'Shaughnessy Small Cap Value) performing so well as our core (O'Shaughnessy All Cap Core, O'Shaughnessy International ADR) and growth strategies (O'Shaughnessy Small-Mid Cap Growth) have fared poorly—it is entirely consistent with the returns we have seen coming out of all other severe bear markets.

What is most encouraging about this data is that the recovery of 2009 has been very similar to those following past severe bear markets. Instead of using 2009 as evidence that multi-factor and momentum-based quantitative strategies are broken, this evidence suggests that this year has just been more of the same. The very same trends prevail following other severe bear markets and are therefore, in our opinion, not cause for concern about the efficacy of quant strategies.

Table 3a: Returns, Year 1 After (%)

After bear market* ending:	S&P 500 Index	All Stocks Universe	Large Stocks Universe	Small Stocks Universe	All Stocks Universe: Book-to-Price (B/P) Worst Decile	Book-to-Price (B/P) Best Decile	6-Month Momentum (6MM) Worst Decile	6-Month Momentum (6MM) Best Decile	Shareholder Yield (SH Yield) Worst Decile	Shareholder Yield (SH Yield) Best Decile	Dividend Yield Best Decile	B/P + SH Yield > Median, 25 Best 6MM
6/1/1932	162.88	201.69	171.23	287.92	115.59	314.58	296.01	133.85	234.90	210.02	214.52	197.38
3/1/1938	35.18	34.94	32.59	38.63	44.10	38.48	51.30	23.61	38.18	47.90	48.75	32.05
11/1/1946	8.01	3.56	3.46	3.56	-0.79	0.13	-5.10	7.15	1.60	6.64	4.25	11.11
6/1/1962	31.16	27.91	30.13	26.57	19.27	46.33	22.56	31.29	24.20	29.19	28.34	37.97
6/1/1970	41.87	53.87	47.57	57.49	59.54	49.73	63.50	48.58	62.44	37.68	36.91	36.58
9/1/1974	38.13	45.47	44.89	45.29	38.65	46.80	53.90	43.95	45.83	37.50	38.62	43.34
11/1/1987	23.20	28.46	26.89	30.06	18.42	39.00	23.53	25.11	23.05	27.96	16.20	29.40
9/1/2002	24.40	44.53	32.63	49.60	50.10	66.36	95.23	45.25	42.09	31.36	28.63	43.16
2/1/2009**	45.75	70.68	58.17	77.37	60.12	131.95	144.12	41.42	82.74	72.82	81.76	36.17
Overall Average	**45.62**	**56.79**	**49.73**	**68.50**	**45.00**	**81.49**	**82.78**	**44.47**	**61.67**	**55.68**	**55.33**	**51.91**
Severe Bear Average	**61.27**	**79.46**	**67.90**	**99.76**	**61.71**	**119.64**	**128.11**	**57.62**	**88.75**	**79.92**	**82.46**	**70.42**

* Shaded rows denote severe bear markets — the market declined by 40 percent or more.
** Performance through September 2009.

[10] Based on the worst decile of 6-month momentum of our All Stocks Universe, 3/9/2009–12/15/2009, see "Buying the Bounce" at www.osam.com/research.php

Second Year of Recovery

Given that we are coming up on the second year of market recovery, this section provides insight into what we may see in the market in 2010. Historically, the second year following a severe bear market sees a recovery of more traditional long-term relationships, with the best decile of all four factors outperforming the worst decile in every case.

The multifactor model returns to form in year two, beating the All Stocks Universe following all four severe bear market observations by an average of 9.9 percent. The bizarre market dynamics from the first year of recovery subside in year two and the expected long-term advantage of buying stocks with our criteria returns. This evidence is very encouraging for all of our strategies in 2010.

Table 3b: Returns, Year 2 After (%)

After bear market* ending:	S&P 500 Index	All Stocks Universe	Large Stocks Universe	Small Stocks Universe	All Stocks Universe: Book-to-Price (B/P)		6-Month Momentum (6MM)		Shareholder Yield (SH Yield)			
					Worst Decile	Best Decile	Worst Decile	Best Decile	Worst Decile	Best Decile	Dividend Yield Best Decile	B/P + SH Yield > Median, 25 Best 6MM
6/1/1932	-6.09	-1.89	-4.28	0.81	4.21	-20.46	-10.31	-3.19	-4.88	2.58	-0.30	3.53
3/1/1938	17.63	21.96	17.09	26.62	22.35	16.05	20.62	34.49	40.20	21.14	22.56	23.79
11/1/1946	4.36	0.71	1.76	-0.14	-7.97	7.22	-2.99	-1.47	-5.11	2.19	3.03	5.11
6/1/1962	21.51	14.98	17.44	13.72	13.62	29.70	6.88	26.54	10.46	19.45	18.25	24.53
6/1/1970	10.74	8.62	9.50	8.20	34.06	5.99	-2.23	26.26	9.28	4.30	4.02	2.59
9/1/1974	30.47	32.87	31.03	34.86	13.05	53.45	27.88	28.36	30.41	35.77	30.45	37.81
11/1/1987	30.78	26.58	28.40	24.76	36.25	19.93	13.17	33.89	23.35	26.00	22.11	30.09
9/1/2002	13.86	19.55	19.90	19.45	6.64	37.20	19.01	10.11	13.36	24.91	29.38	46.96
2/1/2009**	—	—	—	—	—	—	—	—	—	—	—	—
Overall Average	**15.41**	**15.42**	**15.11**	**16.04**	**15.28**	**18.63**	**9.00**	**19.37**	**14.63**	**17.04**	**16.19**	**21.80**
Severe Bear Average	**13.97**	**18.12**	**15.94**	**20.44**	**11.56**	**21.56**	**14.30**	**17.44**	**19.77**	**21.10**	**20.52**	**28.02**

* Shaded rows denote severe bear markets — the market declined by 40 percent or more. ** Performance through September 2009.

Third Year of Recovery

By the third year of recovery, the effectiveness of our factors continues to rotate. The average return of the overall market comes way down by the third year, with our All Stocks Universe averaging just 2.15 percent. The market in year three is much friendlier to trend-following and high-yield strategies than to value. Momentum, dividend yield, and shareholder yield have shown very strong performance relative to the market, while companies with high book-to-price begin to lag considerably.

Our multi-factor model continues to outperform, beating the All Stocks Universe following all four severe bear markets by an average of 11.4 percent.

This sort of market would be very friendly to our core, growth and high-yield strategies, but less so to strategies driven primarily by strong value multiples.

Table 3c: Returns, Year 3 After (%)

After bear market* ending:	S&P 500 Index	All Stocks Universe	Large Stocks Universe	Small Stocks Universe	All Stocks Universe: Book-to-Price (B/P)		6-Month Momentum (6MM)		Shareholder Yield (SH Yield)			
					Worst Decile	Best Decile	Worst Decile	Best Decile	Worst Decile	Best Decile	Dividend Yield Best Decile	B/P + SH Yield > Median, 25 Best 6MM
6/1/1932	9.56	8.82	10.04	7.71	12.08	-31.47	-3.25	14.30	3.49	22.35	25.91	12.03
3/1/1938	-13.12	-13.01	-14.26	-11.62	-22.32	-5.58	-13.93	-13.18	-25.57	-8.16	-7.77	-5.85
11/1/1946	17.20	19.02	19.50	18.62	23.73	12.31	21.27	20.34	15.20	12.94	12.87	13.26
6/1/1962	6.17	9.40	8.15	10.01	7.83	8.65	7.46	8.93	6.59	10.65	11.59	8.33
6/1/1970	0.18	-23.70	-13.05	-30.25	-26.14	-17.25	-38.85	-27.81	-34.21	-2.12	3.41	-13.33
9/1/1974	-4.15	12.15	4.55	20.77	-1.15	13.09	7.27	19.04	7.90	19.41	20.21	23.53
11/1/1987	-3.53	-16.23	-11.94	-20.49	-14.43	-32.32	-29.72	-14.05	-19.09	-13.28	-8.26	-12.48
9/1/2002	12.24	20.74	23.01	19.97	16.78	23.72	13.83	30.04	17.68	20.60	23.92	44.60
2/1/2009**	—	—	—	—	—	—	—	—	—	—	—	—
Overall Average	**3.07**	**2.15**	**3.25**	**1.84**	**-0.45**	**-3.61**	**-4.49**	**4.70**	**-3.50**	**7.80**	**10.24**	**8.76**
Severe Bear Average	**1.14**	**7.18**	**5.83**	**9.21**	**1.35**	**-0.06**	**0.98**	**12.55**	**0.87**	**13.55**	**15.57**	**18.58**

* Shaded rows denote severe bear markets — the market declined by 40 percent or more. ** Performance through September 2009.

Lessons Learned

This study of all major U.S. market downturns since 1926 has yielded several valuable lessons about market dynamics and stock movements surrounding bear markets. The evidence suggests that far from being "different this time," this market has followed patterns very similar to past severe bear markets, both during the decline and during the recovery to this point. Given the consistency of several patterns in the performance of our factors, buying stocks which have high book-to-price, high momentum, high shareholder yields, and strong dividend yields should be a very good investment strategy in the future. Strategies that combine these factors will have very strong relative returns if history once again repeats itself.

Above all else, it is encouraging that the credit crisis bear market has mimicked other similar bear markets of the past. There is no "new normal" for our factors, as all the evidence suggests the next two years will be very rewarding for our brand of disciplined quantitative investing.

Past performance is no guarantee of future results. Please see important information at the end of this presentation.

Backtested Results

Hypothetical performance results shown on the preceding pages are backtested and do not represent the performance of any account managed by OSAM, but were achieved by means of the retroactive application of each of the previously referenced models, certain aspects of which may have been designed with the benefit of hindsight.

The hypothetical backtested performance does not represent the results of actual trading using client assets nor decision-making during the period and does not and is not intended to indicate the past performance or future performance of any account or investment strategy managed by OSAM. If actual accounts had been managed throughout the period, ongoing research might have resulted in changes to the strategy which might have altered returns. The performance of any account or investment strategy managed by OSAM will differ from the hypothetical backtested performance results for each factor shown herein for a number of reasons, including without limitation the following:

- Although OSAM may consider from time to time one or more of the factors noted herein in managing any account, it may not consider all or any of such factors. OSAM may (and will) from time to time consider factors in addition to those noted herein in managing any account.
- OSAM may rebalance an account more frequently or less frequently than annually and at times other than presented herein.
- OSAM may from time to time manage an account by using non-quantitative, subjective investment management methodologies in conjunction with the application of factors.
- The hypothetical backtested performance results assume full investment, whereas an account managed by OSAM may have a positive cash position upon rebalance. Had the hypothetical backtested performance results included a positive cash position, the results would have been different and generally would have been lower.
- The hypothetical backtested performance results for each factor do not reflect any transaction costs of buying and selling securities, investment management fees (including without limitation management fees and performance fees), custody and other costs, or taxes – all of which would be incurred by an investor in any account managed by OSAM. If such costs and fees were reflected, the hypothetical backtested performance results would be lower.
- The hypothetical performance does not reflect the reinvestment of dividends and distributions therefrom, interest, capital gains and withholding taxes.
- Accounts managed by OSAM are subject to additions and redemptions of assets under management, which may positively or negatively affect performance depending generally upon the timing of such events in relation to the market's direction.
- Simulated returns may be dependent on the market and economic conditions that existed during the period. Future market or economic conditions can adversely affect the returns.

All Stocks Universe

The universe of All Stocks consists of all securities in the S&P Compustat Database with inflation-adjusted market capitalization greater than $200 million as of 12/31/08. The 50 stocks are equally weighted and generally rebalanced annually.