



## Casino Factors: Fourth Quarter, Small Cap Stocks, Power Periods

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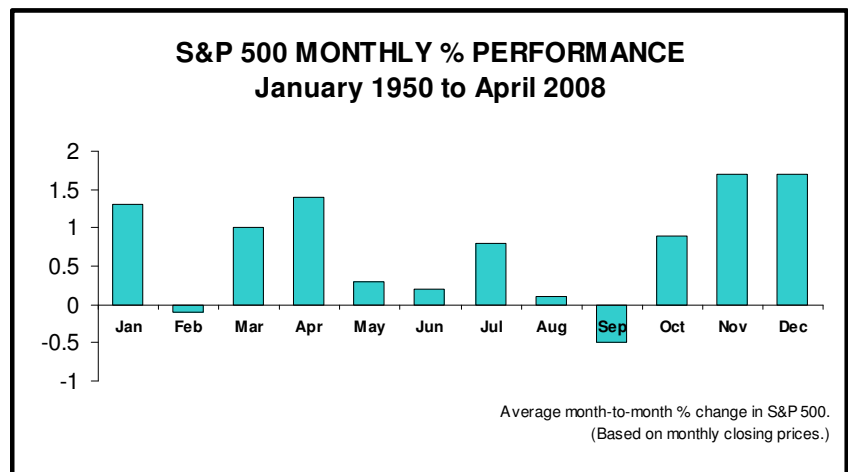
The casino always wins. The casino may suffer a losing week or a losing month, but as long as gamblers keep showing up, the final result is inevitable. The casino wins because it has stacked the odds overwhelmingly in its favor and eventually the laws of probability grind out the result.

Alpha seeks to emulate the casino. We want to stack the odds overwhelmingly in our clients' favor. We can do this because, unlike many investment managers, we don't believe that the stock market delivers its returns randomly. Instead, we believe that there are systematically recurring patterns in the distribution of market returns which can be exploited over the long term. These patterns are caused by the structure of the investment equation including the patterns of human behavior. We call these patterns "casino factors".

### The Fourth Quarter and Small Cap Stocks

The fourth quarter of the year is the best quarter for the stock market. In particular, the period from late-October to year-end is especially consistent in producing above-average gains.

As you can see from the table to the right, the May to October period has been especially weak compared to the rest of the year. In fact, the market, during this period, has been flat on average, with September being negative overall. This summer weakness is not just a U.S. phenomenon. Academic research has established this pattern of weak-to-negative returns in the summer for 36 out of 37 developed and emerging markets. In many of these markets, the summer "dead zone" is far more pronounced than in the U.S.



There is much speculation about what causes this pattern, but no consensus. One likely cause is the tendency of stock market pundits and research firms to revise their yearly forecasts downward as the fourth quarter approaches. Their forecasts are almost always too optimistic. In addition, institutional investors do quite a lot of tax rebalancing just prior to the fourth quarter, which puts downward pressure on the market. What ever the cause, the effect is undeniable – the market tends to deliver sub-par returns from May to October, then "wakes up" in November. The average daily gain for the Dow Industrials from November to May was 27.4 times higher than the average daily gain during all other trading days (1949-2008).

This resurgence in the stock market is particularly strong in small cap stocks. Perhaps investors, looking at rosier forecasts for the new year, concentrate on riskier stocks with more profit potential. Market observers have known for a long time that small cap stocks outperform large cap stocks at year-end. The average return for the Russell 2000 small cap index in December since its inception in 1979 has been 2.8%, compared to the S&P 500's average of 1.5%.

## Power Periods

In the fourth quarter, there are three sub-periods (we call them "power periods") which are especially potent and consistently positive. They are:

- Power Period #1: Last two days of October and first two days of November
- Power Period #2: Last six days of November and first three days of December
- Power Period #3: Last seven days of December

These three periods exploit other lesser known "casino factors" in addition to fourth quarter strength and small cap dominance. For example, it is well established that the market does better during the month-end and month-beginning period than other times. Also, the market tends to produce above-average returns around holiday periods. Our three power periods incorporate these other "casino factors" as well – holidays (Halloween, Thanksgiving and Christmas) and turn-of-the-month.

The table below shows the performance of the Russell 2000 small cap index since its inception during our three power periods.

Over the past 30 years, the average return per quarter has been 6.5%. This return represents an annualized rate of about 200%. There have been just two losing quarters over this time period, representing a 93.3% win rate.

We know of no other market-based factors which come close to delivering this kind of return with such unerring consistency.

In some of our investment strategies (ALPHA/PIMCO Bonds Plus and Alpha Seasonal Strategy) we employ these trades with 50% leverage. We use special institutional index funds with no transaction costs to accomplish these 1.5 beta trades. The 1.5 Beta Statistics section of the table shows the 30-year results.

Of course, there is no guarantee that this remarkable effect will continue indefinitely. However, we believe that its causes are deeply rooted in the structure of the investment system.

<b>Russell 2000 Fourth Quarter Power Periods</b>					
Power Period One = Last two days of October, first two days of November Power Period Two = Last six days of November, first three days of December Power Period Three = Last seven days of December					
Year	Power Period One	Power Period Two	Power Period Three	Total Return	Total Return With 1.5 Beta
1979	2.37%	6.05%	1.85%	11.06%	16.60%
1980	1.33%	0.12%	2.16%	3.06%	5.40%
1981	3.11%	2.18%	0.12%	5.48%	8.40%
1982	2.72%	2.64%	2.30%	7.85%	12.00%
1983	-0.91%	0.73%	1.36%	1.17%	1.80%
1984	0.53%	-2.26%	0.79%	-1.00%	-1.50%
1985	1.02%	3.27%	1.58%	5.97%	9.20%
1986	1.18%	3.00%	-1.38%	2.77%	4.20%
1987	10.80%	-5.20%	0.49%	5.55%	8.40%
1988	0.21%	2.48%	1.98%	4.73%	7.20%
1989	0.17%	1.08%	3.33%	4.62%	7.10%
1990	0.55%	5.26%	1.24%	7.15%	11.00%
1991	1.08%	-0.17%	7.56%	8.53%	13.40%
1992	0.92%	2.89%	2.79%	6.73%	10.30%
1993	1.64%	1.16%	3.19%	6.09%	9.30%
1994	0.60%	-1.55%	3.99%	2.99%	4.60%
1995	2.17%	3.92%	3.22%	9.59%	15.00%
1996	0.55%	3.01%	1.82%	5.46%	8.40%
1997	1.73%	0.75%	3.99%	6.58%	10.00%
1998	4.27%	0.18%	4.93%	9.61%	14.90%
1999	3.70%	0.75%	5.95%	10.69%	16.70%
2000	5.58%	1.20%	5.48%	12.70%	18.70%
2001	0.88%	5.93%	1.37%	8.32%	12.90%
2002	4.91%	0.58%	-0.06%	5.45%	11.00%
2003	1.34%	3.72%	1.85%	7.05%	10.70%
2004	-0.29%	4.61%	0.84%	5.18%	8.00%
2005	5.21%	1.15%	0.09%	6.51%	9.90%
2006	-2.05%	0.72%	0.73%	-0.60%	-1.10%
2007	-2.86%	3.52%	1.39%	1.95%	2.30%
2008	10.86%	11.34%	5.13%	29.76%	38.60%

<b>1.5 BETA STATISTICS</b>	
Total Quarters = 30	Average Quarter Return = 9.7%
Losing Quarters = 2	Market Exposure = 8%
Win Rate = 93.3%	Total Return = 1580%
Largest Quarter Loss (1984) = -1.5%	R2000 B+H = 1162%
Largest Quarter Gain (2008) = 38.6%	Average Gain Per Trade = 3.26%