BLUEGRASS
ASSET MANAGEMENT

Best Days vs. Worst Days

Published - 10/22/19 Saturday (October 19th), marked the 32nd anniversary of Black Monday. On that day in 1987, financial markets experienced the most precipitous single-day drop in history. The Dow Jones Industrial Average dropped 508 points or 22.61%. Here are few points that illustrate just how significant the magnitude of Black Monday was:

- A 22.61% decline in the index today would translate to a 6,105 point drop!
- The Dow declined 12.82% on "Black Tuesday", the crash that preceded the Great Depression
- The Dow's largest single-day decline throughout the 2008 financial crisis was 7.87%

With this historic market anniversary in mind, we will look at the Dow's 20 best and 20 worst days since 1985. Looking at the list (below), it quickly becomes apparent that, just as they did in 1987, many of the recent extreme up and down days occur in clusters.

Best / Worst Performing Days

Date	Change %	Date	Change %
10/19/1987	-22.61%	10/7/2008	-5.11%
10/20/1987	5.88%	10/9/2008	-7.33%
10/21/1987	10.15%	10/13/2008	11.08%
10/26/1987	-8.04%	10/15/2008	-7.87%
10/29/1987	4.96%	10/16/2008	4.68%
1/8/1988	-6.85%	10/20/2008	4.67%
4/14/1988	-4.82%	10/22/2008	-5.69%
10/13/1989	-6.91%	10/28/2008	10.88%
10/27/1997	-7.18%	11/5/2008	-5.05%
8/31/1998	4.71%	11/6/2008	-4.85%
9/8/1998	-6.37%	11/13/2008	6.67%
9/8/1998	4.98%	11/19/2008	-5.07%
3/16/2000	4.93%	11/20/2008	-5.56%
4/14/2000	-5.64%	11/21/2008	6.54%
9/17/2001	-7.12%	11/24/2008	4.93%
7/24/2002	6.35%	12/1/2008	-7.70%
7/29/2002	5.41%	3/10/2009	5.80%
10/15/2002	4.80%	3/23/2009	6.84%
9/29/2008	-6.98%	8/8/2011	-5.55%
9/30/2008	4.68%	12/26/2018	4.98%

The clustering of extreme days raises the question: What's the net effect of participating in these whip-saw markets? Though the specifics may be different, we've all heard theories with the same basic premise - a small number of the best market days account for the lion's share of any given year's return. And therefore, the theory goes, investors should be invested at all times to avoid missing these days and the occasional sharp downturn (a la Black Monday) is just a fact of life. Often, however, these analyses seem to examine the best days in a vacuum – there is no recognition of the fact that the best days often occur in close temporal proximity to the worst days and therefore if one were to miss the best days, they might also miss the worst days.

A perfect illustration of this clustering tendency occurred on December 26, 2018. The Dow notched its 11th best gain since 1985, closing up 4.98% for the day. However, this banner day came immediately on the heels of the "Christmas Eve Massacre," when the Dow was down nearly 3% and only three trading days after 12/20/18 when the Dow lost approximately 2%.

Missed Worst 20 Days

Start Date	End Date	% Change	Portfolio Value *(Invested 100,000 in 1985)*
1/2/1985	10/18/1987	87.40%	$187,403.97
10/19/1987	10/25/1987	12.20%	$210,260.64
10/26/1987	1/7/1988	14.38%	$240,495.28
1/8/1988	4/13/1988	10.24%	$265,131.04
4/14/1988	10/12/1989	37.60%	$364,830.80
10/13/1989	10/26/1997	200.30%	$1,095,575.86
10/27/1997	8/30/1998	12.44%	$1,231,816.99
8/31/1998	4/13/2000	44.89%	$1,784,802.75
4/14/2000	9/16/2001	-6.81%	$1,663,279.69
9/17/2001	9/28/2008	24.91%	$2,077,538.92
9/29/2008	10/6/2008	-3.95%	$1,995,373.16
10/7/2008	10/8/2008	-2.00%	$1,955,451.16
10/9/2008	10/14/2008	8.53%	$2,122,250.06
10/15/2008	10/21/2008	5.31%	$2,235,006.60
10/22/2008	11/4/2008	12.98%	$2,525,183.11
11/6/2008	11/18/2008	-3.12%	$2,446,475.70
11/20/2008	11/30/2008	16.91%	$2,860,063.93
12/1/2008	8/7/2011	40.44%	$4,016,683.26
8/8/2011	10/16/2019	149.79%	$10,033,294.65
		Total Gain of:	**9933.29%**

Missed Best 20 Days

Start Date	End Date	% Change	Portfolio Value *(Invested 100,000 in 1985)*
1/2/1985	10/19/1987	45.03%	$145,028.23
10/21/1987	10/28/1987	-8.93%	$132,081.29
10/29/1987	10/27/1997	269.45%	$487,973.63
10/28/1997	9/7/1998	1.89%	$497,210.12
9/8/1998	3/15/2000	26.31%	$628,047.97
3/16/2000	7/23/2002	-27.55%	$455,048.54
7/24/2002	7/28/2002	0.89%	$459,109.44
7/29/2002	10/14/2002	-9.58%	$415,132.98
10/15/2002	9/29/2008	25.56%	$521,221.72
9/30/2008	10/12/2008	-22.11%	$405,960.81
10/13/2008	10/15/2008	-8.63%	$370,945.93
10/16/2008	10/19/2008	-1.41%	$365,697.76
10/20/2008	10/27/2008	-11.76%	$322,689.91
10/28/2008	11/12/2008	-8.63%	$294,836.88
11/13/2008	11/20/2008	-14.52%	$252,023.81
11/21/2008	11/23/2008	0.00%	$252,023.81
11/24/2008	3/9/2009	-22.46%	$195,420.60
3/10/2009	3/22/2009	5.08%	$205,348.65
3/23/2009	12/25/2018	180.25%	$575,499.01
12/26/2018	10/16/2019	18.02%	$679,224.88
		Total Gain of:	**579.22%**

Data from 12/31/1984 - 10/16/2019.

Buying and holding DJIA over the last 34 years resulted in a cumulative return of 2,129%. While missing the 20 worst days led to significant outperformance and missing the 20 best days resulted in dramatic unperformance , missing all 40 of these outlier days would have resulted in significantly outperforming the buy-and-hold strategy.

Missed Best & Worst 20 Days

Start Date	End Date	% Change	Portfolio Value *(Invested 100,000 in 1985)*
1/2/1985	10/18/1987	87.40%	$187,403.97
10/21/1987	10/25/1987	-3.80%	$180,279.69
10/26/1987	10/28/1987	2.95%	$185,594.83
10/29/1987	1/7/1988	5.86%	$196,468.19
1/8/1988	4/13/1988	10.24%	$216,593.92
4/14/1988	10/12/1989	37.60%	$298,041.80
10/13/1989	10/26/1997	200.30%	$895,010.50
10/28/1997	8/30/1998	7.38%	$961,060.37
8/31/1998	9/7/1998	1.34%	$973,958.52
9/8/1998	3/15/2000	26.31%	$1,230,249.85
3/16/2000	4/13/2000	2.76%	$1,264,146.35
4/14/2000	9/16/2001	-6.81%	$1,178,073.58
9/17/2001	7/23/2002	-13.66%	$1,017,119.13
7/24/2002	7/28/2002	0.89%	$1,026,196.02
7/29/2002	10/14/2002	-9.58%	$927,900.35
10/15/2002	9/28/2008	34.98%	$1,252,436.30
10/1/2008	10/6/2008	-8.08%	$1,151,190.94
10/7/2008	10/8/2008	-2.00%	$1,128,158.73
10/9/2008	10/12/2008	-1.49%	$1,111,326.80
10/13/2008	10/14/2008	-0.82%	$1,102,256.23
10/16/2008	10/19/2008	-1.41%	$1,086,661.45
10/20/2008	10/21/2008	-2.50%	$1,059,479.17
10/22/2008	10/27/2008	-4.03%	$1,016,768.11
10/28/2008	11/4/2008	6.18%	$1,079,597.18
11/6/2008	11/12/2008	-4.75%	$1,028,306.50
11/13/2008	11/18/2008	-4.65%	$980,529.72
11/21/2008	11/23/2008	0.00%	$980,529.72
11/24/2008	11/30/2008	4.57%	$1,025,315.45
12/1/2008	3/9/2009	-19.66%	$823,747.00
3/10/2009	3/22/2009	5.08%	$865,596.24
3/23/2009	8/7/2011	47.18%	$1,273,995.48
8/8/2011	12/25/2018	101.60%	$2,568,321.95
12/26/2018	10/16/2019	18.02%	$3,031,227.06
		Total Gain of:	**2931.23%**

So, with a complete data set, we wanted to see how a hypothetical investor would have fared in a Buy-and-Hold vs. Missing both the Best 20 and Worst 20 days.

- **Buy and Hold the Dow Jones Industrial Average from 12/31/84 – 10/16/19 would have returned 2,128.68%.**
- **Missing Both the Best 20 & Worst 20 Days – side stepping these 40 days would have returned 2,931%, outperforming the buy-and-hold scenario by almost 803%.**

So, what does all of this mean to the average investor? Clearly the first two portfolios represent extremes: losing the race and winning the race. For most investors, however, it's not about winning or losing, it's about finishing the race and achieving their personal goals. Most people don't enter the market with the goal of always outperforming. Instead, they are hoping to incrementally build wealth while preserving what they have already saved. The portfolio that falls right down the middle, missing both the best and worst days, proves that you don't have to ride the volatility roller coaster in order to meet your goals. Additionally, it shows that market sessions with high volatility have a tendency to occur in clusters; so, while buy and hold may be better than totally missing out on only the 20 best days, the worst days tend to occur in the same volatile periods as the best days.

Investors can participate in the upside and control their losses on the downside and understanding the supply and demand relationship in everything from individual stocks to asset classes is the key. Using pattern recognition tools, relative strength, and trend charts gives us the guidance to recognize how our portfolios should be allocated to avoid the full impact of the worst days or clusters of days in total. This tactical game plan means we won't experience every best day or worst day in the market, but that's okay. What the numbers show is that we can still do very well by running the race our way - staying on even terrain on the way to achieving our goals.

Wholesalers like to say, "If you miss the best 10 or 20 days your return is reduced by…". Turns out you might just do better to miss the 10 or 20 best days since they are often linked to the 10 or 20 worst days. Our strategy helps investors exit the most sensitive securities during the most volatile periods.

Please contact us to learn more about rules-based disciplined investing and how it can help your clients. The Bluegrass Asset Management team can be reached at 502-429-0196, ask for John Casconi, Rodger McAlister or Jennifer Grilliot.