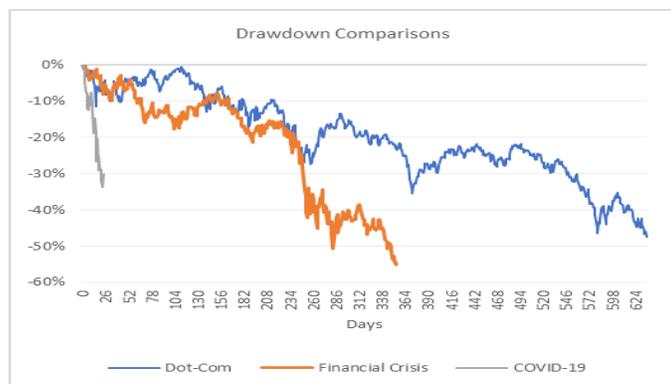


March 2020 has delivered exceptional market volatility. We'd have to go back to the 1930s to find a period where markets declined so quickly. The damage inflicted so far by COVID-19 across the global economy is far reaching. Entire swaths of the economy have literally shut down. The virus will eventually pass, but the timeline to recovery is far from certain.

The current environment is similar to past episodes of market turmoil. In the news we've heard numerous references to the October 1987 market crash, when equity markets declined -20% in a single day. Unlike the dot-com crash of 2000 and the financial crisis of 2008-09, which unfolded over several quarters, the current dilemma has transpired rapidly.

In the chart below, we illustrate the market drawdowns over the prior two recessions (peak to trough for S&P 500) and compare them to the current drawdown. As you can see, the pace of the current decline far exceeds what we experienced in the early 2000s and during the financial crisis of 2008-2009:



Allocating across global equity markets did little to protect portfolios from downside risk. From the market peak on February 19th through March 24th, all the broad equity market indexes have declined by roughly the same magnitude, based on Table 1 below:

ETF	Total Return
Domestic (SPY)	-27.7%
Developed Markets (EFA)	-26.9%
Emerging Markets (EEM)	-25.6%

Source: YCharts

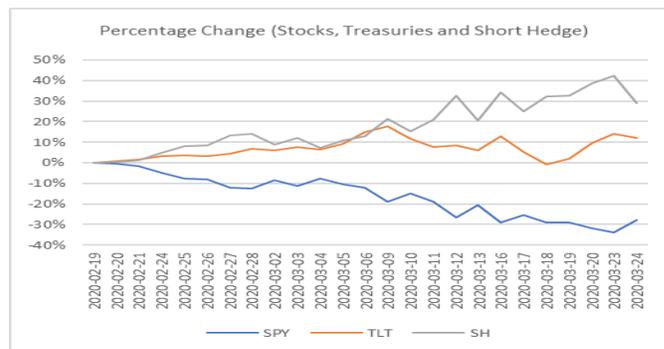
Likewise, allocating across various equity factors has proven ineffective downside protection. Based on Table 2, the returns across the primary factors in the U.S. reflect

roughly the same degree of loss from the February 19th peak through March 24th, 2020:

ETF	Total Return
Value (FVA)	-37.4%
Size (FYZ)	-38.6%
Quality (SPHQ)	-24.4%
Momentum (MTUM)	-27.1%
Low Volatility (SPLV)	-29.5%

Source: YCharts

Despite the downturn across the board in equities, there were measures we could take to offset some of recent market turbulence. In the chart below, we highlight the returns of long-term U.S. Treasuries and a short, or inverse, position to the S&P 500 from the market peak of February 19th through March 24th:



As the chart above illustrates, U.S. Treasuries (TLT) have rallied roughly 12% during the steep equity selloff. As expected, an inverse position to the S&P 500 (SH) has rallied nearly 30% over the period.

As we've seen over the last several weeks, market conditions can deteriorate quickly. We have not seen a pullback of such magnitude and quickness since the 1930s. The nature of this drawdown is quite different in terms of duration than what we experienced in the last two recessions. Simply holding various exposures to equities, such as domestic or international or low volatility stocks, hasn't done much in terms of protecting portfolios on the downside.

However, portfolios that incorporated various hedges, such as U.S. Treasuries, inverse positions to broad equity indexes or cash, have likely weathered the current storm relatively well so far, and put clients in a position to recover when COVID-19 passes.