INVESTMENT PERSPECTIVE Q4 2021

DON'T LOOK UP!

In July and August of 2007, the U.S. stock market suffered a swoon from a peak of the S&P 500 at 1550 to 1400 in a period of 4 weeks. In magnitude and swiftness, very similar to the downdraft we are experiencing now. But some very large, leveraged quantitative funds suffered unheard-of drawdowns. Goldman Sachs' Global Equity Opportunities Fund lost 25% in four trading days. On a conference call with frightened investors, Goldman's CFO, David Viniar, described the carnage thus: "We were seeing things that were 25 standard deviation moves, several days in a row." Viniar's comments drew a gigantic facepalm from the math world. An 8-standard deviation event has a probability of occurring less than 1 trading day since the Big Bang (13.7 billion years ago). The likelihood of a 20-standard deviation event is less than 1 divided by the number of particles in the universe. Moving on to multiple independent 25-standard deviation events challenges human comprehension. A statistician tried to boil it down as the chance that you walk out of your house now and catch an asteroid in your hand. Of course, not everyone needs to be adept at statistics. But if you're running a lottery, insurance company or the world's largest casino – it's probably a good idea. And if you need to describe your investment results in cosmological terms, you're probably using the wrong model for the real world.

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Most people recall the quant meltdown of 2007, like the implosion of Long Term Capital Management (LTCM) a decade before it, with a sense of schadenfreude. As if to impugn intellect, the definitive account of LTCM's demise goes by the derisive title "When Genius Failed." I believe the better descriptor would be "When Imagination Failed." The Goldman quants were, of course, still geniuses. It was not their genius that failed. It was their unwillingness to entertain anything but their genius. To be fair, quants raise money on the robustness of the science. It's a feature – not a bug. Investors like the idea of at least some of their money run with discipline. Like Achilles roped to the mast, they don't want to be tempted by the sirens. But clearly you can land on the rocks either way. But one of the key lessons from the quant crisis of 2007 was the 'discovery' of a new factor – the crowded trade. Simply stated, when everybody sees the world similarly, their ownership of the same assets constitutes a new risk factor. That is the risk that the slightest change in the owners' collective understanding of the world could lead to a cascade of selling.

The current drawdown – as painful and unsettling as it is – seems to fit the crowded-trade construct. Back in our salad days – that was October – the global economy seemed to have clearly emerged from the pandemic. Corporate earnings were strong. Households were flush with cash. With fixed income rates in the cellar, equities seemed to be the obvious choice. The fly in the ointment was a raging antibiotic-resistant case of inflation. The Federal Reserve's hawkish shift in November – with the benefit of hindsight – marked the proximate high in risk sentiment. It would be fair to ask, if that's truly the case, why did the market take another six weeks till the first days of January to seize up. All I can offer is that after a long build-up of convictions, it takes the market a little time to adjust to a new circumstance. And here is where the crowding factor comes into play. Everyone is looking at everyone else to calibrate their level of concern. Of course, a lot else is going on. Oil went from $68/barrel to $90. Bitcoin rolled over hard. Tempers escalated dramatically over Ukraine. And, of course, the first wave of Q4 2021 earnings announcements were underwhelming. But from my seat, those last were more like straws on the camel's back.

And that, believe it or not, is the good news. The market needed to incorporate a higher discount rate, and it has done that with four Fed Funds hikes now forecast for the end of this year. It remains to be seen whether the market has adequately mapped out the actual path of rates, but that's a good start. Also, it is encouraging that the Fed has now signaled forcefully that bringing inflation back into its target range is its primary task. And it has had the intended effect. The 10-year break-even inflation rate at 2.5% and the 5-year inflation rate in five years are in-line with the Fed's desired target. Why is that good news? Because forward earnings estimates have been constant during this whole turbulence. That tells us that the 'bad news' has been all about the discount rate. If you conceive of yourself as a long horizon investor, you should only be concerned with the stream of cash flows that your portfolio will produce in the fullness of time. The mark-to-market caused by the decreased present value of those streams is secondary. Of course, we all wish we had reduced some (all?) risk at the last peak value two weeks ago. But it's not a realistic strategy to imagine that you can reliably time that sale and re-invest at lower levels consistently.

If it's any consolation, bear in mind that part of the reward from equities relative to safe assets is that they experience volatility systematically. These unsettling periods are part and parcel with earning the equity risk premium over the long haul. If these episodes were really 4-, 8- or 25-standard deviation events, equities would earn something closer to 90-day Treasury bill.

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