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The Quants Explain Disaster

A hedge fund manager sent me a copy of a report from Goldman Sachs entitled "The Quant Liquidity Crunch." What follows are Goldman's conclusion, and his dissection of that conclusion. (The manager prefers not to have his name used here. The people he mentions, if anyone needs to be told, are Warren Buffett and Charles Munger of Berkshire Hathaway.)

Goldman:

"All of the evidence suggests that the price dislocations experienced over this period were a result of deleveraging and limited market liquidity, as opposed to any fundamental news about the firms in our portfolios. Given this, we do not believe that current prices reflect fundamental values. If so, the current environment may represent a significant investment opportunity.

The speed in which the market reacted to the dislocation was unprecedented and it is not clear that there were any obvious early warning signs. With the benefit of hindsight, there were a few clues before last week that might have hinted at problems to come, **including the dramatic rise in implied volatilities and the disruption in other markets and the related potential for contagion.** No one, however, could possibly have forecast the extent of deleveraging or the magnitude of last week's factor returns.

Risk management is based on historical precedent; but what the market experienced in recent days has been completely unprecedented. Nonetheless, it is crucial that we work hard to determine if there are indicators that can help us better assess the possibility of such an event in the future**. In particular, we believe that going forward we need to develop better measures to assess the popularity of our factors and the related possibility of liquidity events such as last week's affecting these factors.**

A key lesson from this episode is that too many quant managers were using the same factors. Going forward, we believe that successful quant managers will have to rely more on unique factors. **In fact, to protect our investors, we will need to make more of an effort to make sure that our proprietary factors remain proprietary.** While we have developed a number of these factors over the last several years, in hindsight we did not put sufficient weight on these relative to more popular quant factors**. We will need to develop even more of these proprietary factors going forward.**

In the coming weeks, we will continue to analyze this extraordinary period. We will also re-evaluate and re-prioritize our research agenda in light of recent events. Stay tuned. As we continue to study these events, we hope to gain additional insights that will help us avoid similar problems in the future. In the meantime, however, we remain confident that stocks with better valuations, higher profitability, better earnings quality, shareholder-friendly management, strong momentum and improving analyst sentiment will outperform – that is, our process should continue to add value under normal market conditions."

His commentary, with Goldman quotes in italics, follows. (Please note I have edited the manager a bit. He did not really use the word "baloney.")

a) *“we do not believe that current prices reflect fundamental values”* — based on what? The very models that failed you last week?

b) *“No one, however, could possibly have forecast the extent of deleveraging or the magnitude of last week’s factor returns.”* Baloney. Buffett and Munger have been warning about the dangers of excessive leverage combined with crowded trades for quite some time.

c) *“what the market experienced in recent days has been completely unprecedented”* More baloney. 100-year storms happen every few years in financial markets. Always have, always will (though every storm’s a little bit different — maybe that’s what they mean). The only completely unprecedented thing was the LACK of any 100-year storms for the past few years.

d) *“Going forward, we believe that successful quant managers will have to rely more on unique factors.”* Given that you don’t seem to have come up with any, why should anyone believe that you will now? And given that every quant manager on the planet is trying to do the same thing, what makes you think that everyone else won’t come up with the same “more unique factors”?

e) *“to protect our investors, we will need to make more of an effort to make sure that our proprietary factors remain proprietary”* Yeah, that’s the problem: other quant managers stealing your highly proprietary factors of buying stocks with momentum or companies trading at low multiples of cash flow.

f) *“In the coming weeks, we will continue to analyze this extraordinary period. We will also re-evaluate and re-prioritize our research agenda in light of recent events. Stay tuned. As we continue to study these events, we hope to gain additional insights that will help us avoid similar problems in the future.”* Translation: we don’t know what happened to us or what we’re going to do about it, but we really, really, really don’t want to admit that the fundamental premise of our business is fatally flawed and shut down, so we’ll come up with something.

g) *“we remain confident that stocks with better valuations, higher profitability, better earnings quality, shareholder-friendly management, strong momentum and improving analyst sentiment will outperform”* I think they just about covered every single investing cliche here...

h) *“our process should continue to add value under normal market conditions”* Finally, in the last sentence, they perhaps inadvertently reveal the truth: their success depends on NORMAL MARKET CONDITIONS! In other words, what they do works 99% of the time, but the other 1% of the time they blow up — especially since they insist on using a ton of leverage because their brilliant models tell them that what happened last week was a 28-standard deviation event. Hint: IT WASN’T!