

## Normalcy of Deviance

I recently attended a talk by Charlie Precourt, a 2012 inductee of the US Astronaut Hall of Fame, and a pilot on four space shuttle flights. The topic was "Normalcy of Deviance", a phrase he took from author Diane Vaughn to explain two tragic space shuttle disasters. Normalcy of deviance signifies the condition in which "...people become accustomed to deviant behavior to the point that they no longer see it as deviant. They no longer see what is clearly visible..."

There are five interrelated and evolving events that I have been monitoring that signify a significant change in our perception of what is normal, and which are likely to cause markets to move.

First, after almost a decade the Fed is raising rates. Market participants have become accustomed to low or negative yields globally for a long period of time. This condition of cheap capital, which is "deviant" from the perspective of appropriate long term valuation of the cost of capital, can breed complacency for which markets are ill prepared. By beginning to raise rates, the Fed is implicitly removing the insurance that it has provided for increasingly bold risk taking.

Second, cracks are showing up in emergent economies like China and are exposing the limits of another deviance. We have assumed that markets (and by some accounts economic data) can be controlled infinitely by fiat or by government action. A set of actions, such as the devaluation of the Chinese currency or the installation and removal of circuit breakers has limited efficacy when executed too late.

Third, we have become so accustomed to the existence of cartels and coordination in commodity markets over four decades that we have possibly forgotten that in the end normalcy requires supply to meet demand. The behavior of oil producers in the face of competition and massive inventory is to do what is natural and short term optimal, i.e. "each on the lookout for himself". This has shown up in unexpected and sharp declines in the price of oil and other commodities.





Fourth, the slow but definite increase of algorithms and computerized investment programs has permanently changed the ecology of markets. These algorithms are not necessarily versed in the same type of metrics or process of valuation that human investors have evolved over time. The well covered shuttering of many investment management firms last year signifies that trading today is very different than it used to be a decade ago. The proliferation of such algorithmic trading, good or bad, makes it close to impossible to identify what is normal trading vs, what is a deviation from the norm.

Fifth, we have to admit that seven years after the last major crisis, the majority of traders manning trading desks today have not experienced major illiquid bear markets. The perception of liquidity in a rising bull market is not what one should think of as normal.

The one common theme amongst the five here is exposed by asking: Is what we have observed since the massive introduction of money into the system in the aftermath of the crisis really normal, or have we just gotten used to deviant behavior of markets and policy through seven years of conditioning?

I visualize the behavior of markets in three distinct phases.

The first phase is one in which deviations of markets from a fair level self-corrects due to common and correct beliefs. In this phase mean-reversion participants flourish.

In the second phase, as markets move further away from fair value, well-held beliefs are exposed as nothing but deviations that have been normalized and markets start to trend, breaking previous bounds. Witness the behavior of oil from fifty dollars a barrel to below thirty.

Beyond this phase, as the old normal behavior is abandoned as being clearly deviant, a new set of assumptions begins to take hold, and markets enter the zone of capitulation.

Such is the power and speed of recalibration in the markets that what is unexpected becomes the expected. This is where we are today, and we should expect that the changes underfoot will be seen as a major inflection point, and markets will have quickly adjusted, through capitulation or repositioning, to these new realities.