

THE 2016 SOLUTION TO ZENO'S PARADOX

CONTEXT

Standing at some point after Q3 2007 and before Q3 2008 in the [chart](#) at right, facing the sudden, unremitting decorrelation ensuing between commodity and stock prices, epitomizes the word paradox or conundrum, as Greenspan called 2005 bond markets. We know how both "conundrums" ended (and who caused them), yet an even larger decorrelation between these two asset classes begun in Q4 2012, that has remained a paradox until now!

[Greek philosopher Zeno of Elea](#), the 5th century BC master of paradoxes, posed a riddle known as the "Dichotomy Paradox of Motion," akin to Aesop's "The tortoise and the hare." Zeno's motion paradox, a precursor to calculus (infinitesimal approximation), argues that if we walk half of any distance, then walk half the remaining distance and keep halving each residual segment, the amount of segments become infinite, so we would never reach our destination. The idea would make sense, unless you realize that regardless of how many segments you halve; they must all add up to the journey's final distance. Thus, physically and mathematically, you always reach your destination...

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...Surprisingly, even when analyzing uncertain results, such as outcomes ruled by market prices, the same solution to Zeno's paradox should apply. For instance, in the case of the ongoing decorrelation, up until August, the space between the lines looked to be growing indefinitely. Yet, as the value of both assets classes is correlated with the state of the economy, such a massive gap has to come from financial sources: information asymmetry, perhaps?

In other words, the red (commodities) and black (stocks) lines cannot continue to separate indefinitely, so the bulk of space between them should dissolve at some "end of the journey" point. Consequently, what we are witnessing may be the investment tracks of an infinitesimally small group of economic agents (call it [SIFI](#)), who control vast amounts of financial power and have access to advanced/privileged information. For instance, the chart's first massive decorrelation from Q3 2007 to Q3 2008, reveals that initially, SIFI had an inflationary bias. Yet, by the time of the second decorrelation, SIFI had replaced its bias to deflationary. By then, SIFI evidently understood, that QE's effect on M1 is deflationary, even if it still debases GDP in terms of MZM (see why in page 3 of [MITIGATING LEGALLY MANIPULATED...](#)).

Though SIFI's access to privileged information would be difficult to prove, upon reviewing the Fed's meeting minutes from 2007 on, it becomes apparent that many of the dynamics reflected on this chart may have resulted from SIFI's anticipatory moves to: 1) preliminary decisions leading to QE & QE implementation, 3) preliminary decisions leading to QE2/QE3 & their implementation and 4) QE implementation/expansion programs in other G7 markets plus China. Notice that, for instance, when the latest decorrelation begun in Q4 2012: QE3 had just been announced, the ECB's Spanish bank bailout had finally passed and the BOJ's QE expansion was being hyped as key to then upcoming, Abenomics. Could this gap come from actions taken by SIFI, having finally accepted QE's deflationary bias, after getting burned again during 2011?

As 2016 opens with the red line diving faster and deeper into negative territory, SIFI keeps fighting to contain the black line's fatal attraction to it. Yet, the stock market's price dips of August and over the past week, suggest we are getting closer to the point where information asymmetry vanishes again, as it did in August 2008. This time around, however, SIFI's losses would be too large to restore via QE. In its place, Central Banks would need a galactic bazooka!

In sum, just like with Zeno's paradox, regardless of its "infinitely" growing size, the commodity versus stock value-gap must eventually reach its final destination, which is a number much closer to zero. Hence, its momentary state makes the gap an arbitrage, not a paradox.

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