Two Meanings of Risk

By Didier Darcet
didier.darcet@ gavekal-intelligence-software.com

Risk is simply the likelihood of an adverse event.

This is common sense as well as what statistical finance has calculated since Louis Bachelier introduced the concept in 1900. But are we sure this is a proper way to quantify risk for, say, a portfolio manager?

At the end of the day, risk is more than the pain associated with a temporary loss. Risk is the amount of money lost forever!

Take the S&P500 9% loss in December 2018 for instance. According to the first definition, risk was therefore 9%. The December downside deviation was however only a part of a complete fluctuation cycle. The S&P500 recovered all its December losses in January and February 2019.

So, risk was what?

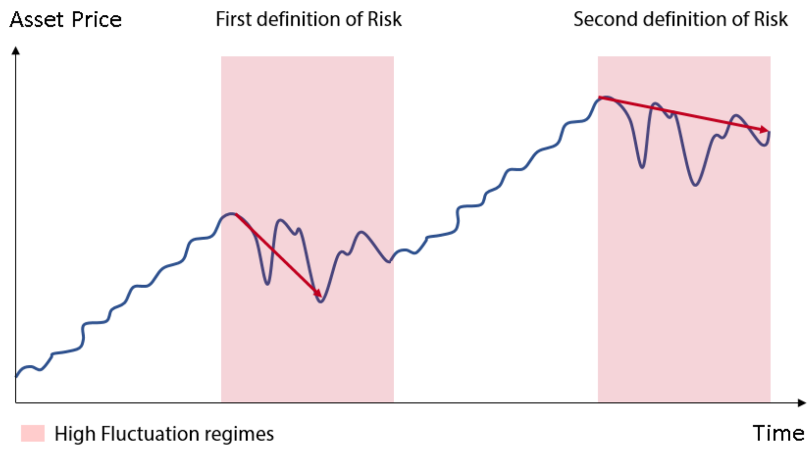
- 9%?
- Zero?
- Something else?

The second risk definition- money lost forever- is absent from modern portfolio theories and yet it is fundamental in the portfolio construction processes.

"Forever" might well sound like a rather long period of time within a linear and occidental view of time. However, it is not within a cyclical view of time, which prevailed before Christ and remains dominant in many cultures.

Finance exhibits cyclical periods of high volatility and low volatility, which can be well identified. In a cycle, "forever" means the end of fluctuation type, the closing of a cycle, until everything starts again.

Illustration 1. The two meanings of financial risk



Source: Author's illustration

The Three Home Owners

The differentiation of risk is a concept that can be seen in the following story. Three home owners see their house destroyed by the fire.

1. The first one had no insurance and loses his property.
2. The second one had insured his house. He loses his property, gets reimbursed by the insurance company and rebuilds his house. He ends the risk cycle breakeven.
3. The third one had insured his house twice its value. He ends the risk cycle with profit.

The difference between the three home owners is what Professor Taleb names a fragile strategy, a robust strategy, or an antifragile strategy.

The traditional risk measure concludes that the three owners face the same downside risk (the destruction of their house), which is a temporary adverse event. The second risk measure focuses on the end of a high volatility regime and enables a risk differentiation between the three home owners, depending on their sensitivity to fluctuation regimes.

A fragile asset, such as most stocks for instance, is likely to end a high fluctuation regime in negative territory, as was the case for the first home owner. It may start producing positive returns looking forward but from a lower base, and the value gap of the past cycle is lost forever. Antifragile assets on the other hand, are likely to end a high fluctuation regime with a profit.

A possible End of the High Fluctuation Cycle

On February 28, TrackMacro started reinvesting in selected equity markets, albeit with cautiousness. The balanced view of the AI model comes from a mixed macro picture:

1. Inflation is decelerating across the board, which favors the inflation/growth mix tracked by the Four Quadrants' rule on each country.
2. Global earnings slowdown exerts opposite pressure.
3. Global industrial production confirms its weakness but does not propagate to services.
4. The oil price level is considered neutral.
5. Liquidity continues to deteriorate, mostly in the USA.
6. Global trade weakness was confirmed by official figures in November and December but is anticipated to have flattened since then by the model.

TrackMacro has not turned fully optimistic but more balanced. The AI model is consistent with the possibility of a soft and prolonged landing, favored by the FED's radical change of tone and the probable end of its tightening cycle.

Conclusion

The high volatility equity regime, which started at the end of September 2018, has destroyed value in equity markets despite the early 2019 strong recovery (the MSCI World TR is down close to 4%). TrackMacro ends the cycle barely flat, even though it was caught on the first leg down in October 2018 and missed the 2019 recovery.

Equity markets confirm their fragile nature, a risk which can only be captured by the second definition of risk.