Bullet Points for Day 20

Rolling Statistics and Momentum Strategies

It never makes sense to ignore data, and we always want to use all the data that is available to us at the time we must act. This means we need to compute many statistics in a "rolling" fashion. That is, we have some trailing window of time, say 90 days, and for each day we use the preceding 90 days of data to compute the statistics on which we base our decisions. Rolling regression, time series fits, and other kinds of computations are needed in the analysis of any king of sensible trading strategy. They are up-front and personal when one considers momentum strategies, which we will do at some length.

- Examples and S-Tools
  1. Rolling Averages, Standard Deviations, etc.
  2. Syntax of aggregateSeries()
  3. EDA reminders — especially about box plots
  4. Review of the EDA of batches
- Exponential Moving Averages (EWMA)
  1. Benefits: logical and computational
  2. Relation to simple moving averages and $\lambda = (n-1)/(n+1)$
- CitiGroup Discussion of Trend Following Methods
  1. Currency Trader's Staple
  2. Information Ration (IR) — Sharpe vs a Benchmark
- Woofers, Tweeters, Oscillators and MACD
  1. Fascinating Pictures
  2. For equities, it works less well than it "feels" like it should
- Momentum and the EMH
  1. Are currencies and commodities Different?
  2. Academic resources and analyses

Quote of the Day

"If I knew the *Jazz of the Future* I'd play it." — source unknown, sometimes attributed to Dizzy Gillespie