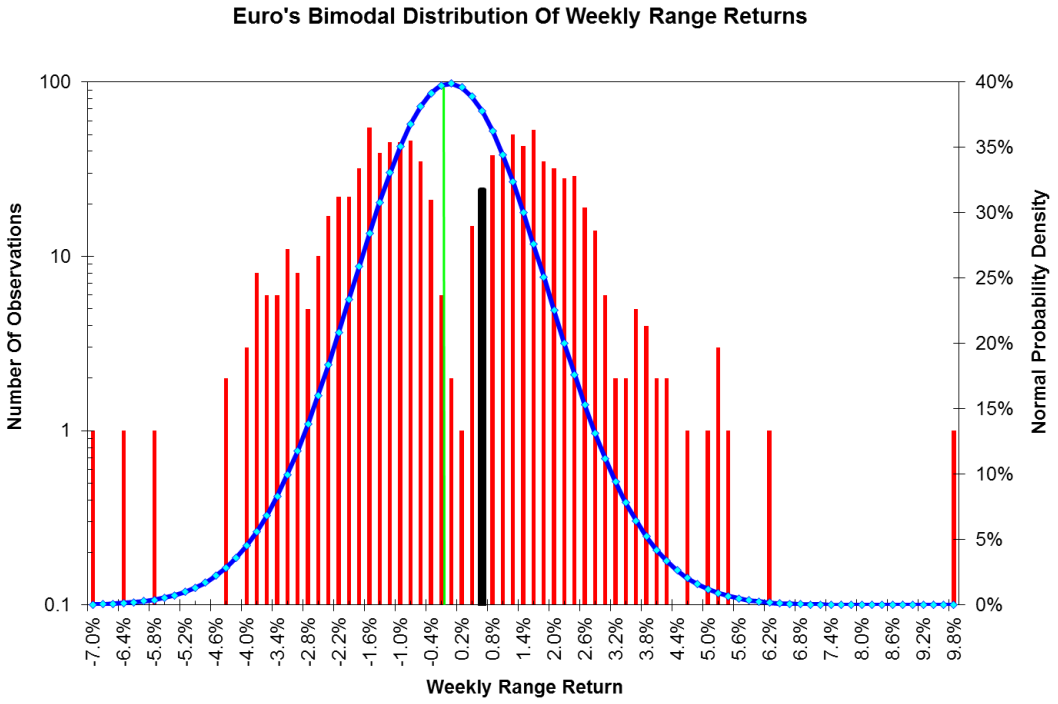
Yen's Recent Jump Within Historic Norms

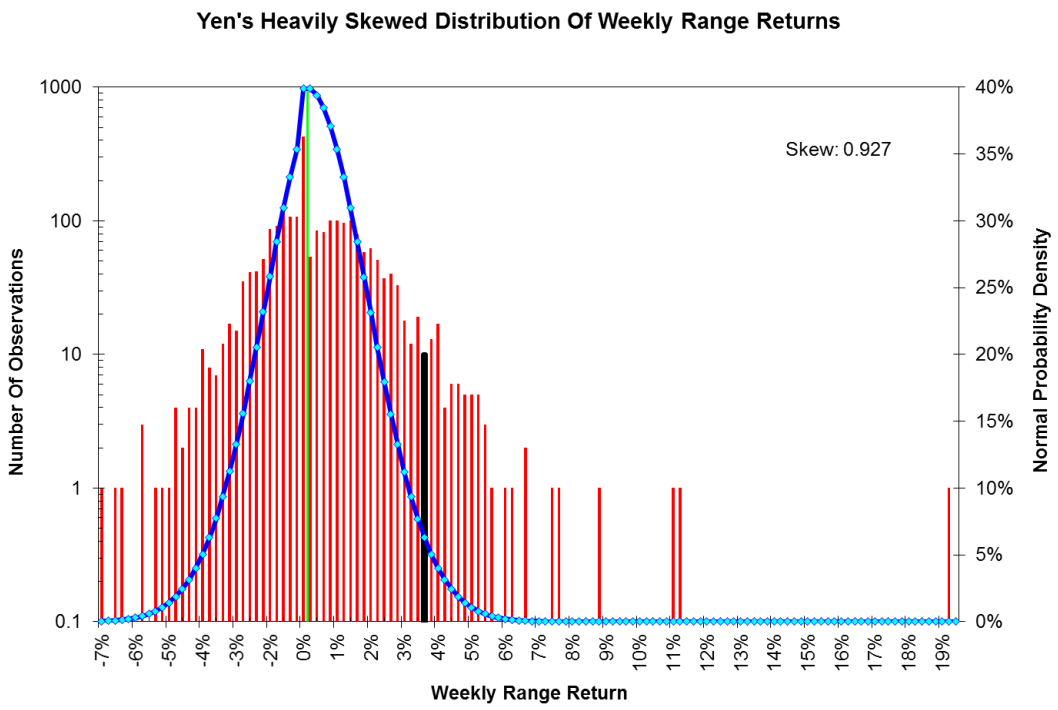
Technical analysis is based on the immutability of human behavior and the notion this leads to repeatable patterns over time. By implication, this should lead to self-similarity of trading patterns across both timeframes and separate markets. However, this proposition collapses readily on examination. Let's take a currency trading example.

First, instead of the daily price returns beloved by students of such matters, let's take a step up the time scale to weekly. Not only does this sidestep the increasingly vexing question of when a trading "day" begins and ends in the 24-hour currency market, it highlights the much larger changes that take place over a week after stops are run, barrier options are hit, etc. Finally, let's modify the weekly return into something we will dub the "range return." These are the percentage changes from the current week's high or low against the previous week's last trade.

The weekly range returns for the euro and yen have been anything but lognormal over their respective trading histories. The euro's range returns have averaged -0.033% with a skew of 0.0587 since its inception in January 1999. Similar figures for the yen going back to 1972 are an average range return of 0.099% with a skew of 0.927.

The euro's histogram of range returns looks very different than its yen counterpart does. The euro has a very bimodal distribution, while the yen has a fat-tailed unimodal distribution. The respective means are noted with a green vertical line and the range return for the week ending April 8, 2016 is noted with a black column.





These different weekly range return patterns have been very persistent over time and demonstrate different long-term processes for borrowing the dollar and lending into the euro and yen, respectively. The dollar/euro distribution reflects the effects of relatively stable medium-term trends in expected short-term interest rate differentials; the skewed dollar/yen distribution reflects discontinuous policy shocks intersecting an underlying process with a strong drift term in favor of a stronger yen.

While the spectacle of watching the yen rise while the Bank of Japan is doing everything imaginable to destroy it may be puzzling, the results are quite normal, especially for those of us who are willing to accept 44 years of data as defining normality.

Finally, if technical analysis is based on the premise human behavior across markets and timeframes is immutable and therefore the techniques to analyze different markets should be indifferent to the underlying, then the wildly different weekly range return distributions seen for the euro and yen should not exist. However, they demonstrably do and have done so for long periods of time. Perhaps the one-size-fits-all approach to market analysis stated loudly by doctrinaire market technicians should be revisited.