

The Euro's Trading Patterns Changed As Machines Took Over

Rage, rage against the dying of the light? Whatever; we can romanticize the bygone days when trading was executed by people shouting and waving with loud jackets, but those days are gone, quite possibly with the wind.

The de-humanizing of trading execution and its replacement by computers capable of millisecond execution times and capabilities of scanning across markets for minute statistical arbitrage opportunities enabled other developments. Higher costs and slower times for execution precluded trading what amounted to noise, the Brownian motion involved in order flow and therefore rewarded those who could form correct opinions on economic signal.

The process also involved something else familiar to anyone who traded the thinner commodity futures markets, the running of stops to establish the price bounds at which long-term buyers or sellers would enter the market. While this behavior may have seemed sociopathic, it actually provided a real-life confirmation of Adam Smith's invisible hand at work; those price extremes showed up on charts as support/resistance points and signaled both producers and consumers where reservation prices were.

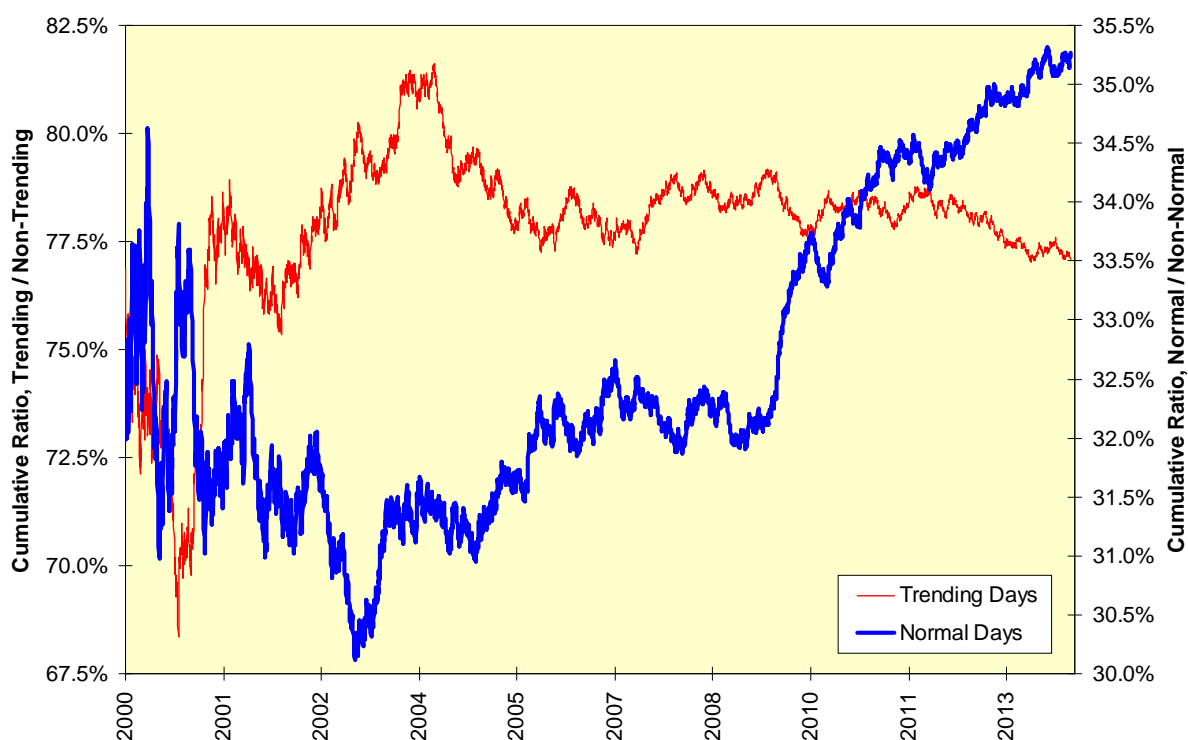
Euro Day Structures

These idle musings actually form testable propositions. Allow me to skip a large number of methodological steps here and state I have constructed a day-structure classification system based upon the intraday relationships between a day's open, high, low, close and midpoint and the interday relationships of those points to the previous day. Eight different intraday structures exist. Unsurprisingly, two pairs of these eight structures are very similar to two classifications from the [market profile](#) analysis long familiar to traders and a staple on various quote screen graphics packages.

Here's the hypothesis: If the computerized trading changed the nature of day structures, we should see fewer "trending" days where markets break out of an opening range and extend into the close and more "normal" days where markets test values outside of the opening range in both directions but close within that opening range.

Let's try this on the spot rate for the euro by mapping the cumulative ratios of normal to non-normal days and trending to non-trending days starting one year after the euro's January 1999 advent. The prevalence of trending days began to, um, trend lower after July 2004. The prevalence of normal days began to increase in May 2003, right when the Federal Reserve embarked on its first war on deflation; it paused during the financial crisis and then resumed its climb.

When Euro Day Structures Changed



These results are consistent with the notion execution affects trading patterns. Whether you should care or not is really a very open question. If you are a short-term trader, you have to adjust to a new playing field, but so what? Rules change frequently in all walks of life. If you are involved in long-term investing, the signposts involved in price discovery will be different, but a market's fundamental economics always prevail in the end.

The real changes – I hesitate to say “losses” – have been and will continue to be cultural. Many professional investors learned the business by being involved in trading execution in some form or another and learned the hard way the consequences of their own errors. There were no mass-cancellations of erroneous orders back then as you see today when some exchange's systems decide to go haywire; no, you paid for your mistakes. That harsh discipline make everyone a little more careful with their money and, more importantly, with your money.