# **Currency Traders Should Be Humbler**

Currency CTAs and investors therein deserve each other, and that is not meant as a compliment. Let's take two frequently cited indices of currency CTA performance, the Barclay Group's and Stark's. The former begins at the end of December 1986; the latter begins at the end of December 1981.

How would a \$1,000 investment in each index fared in nominal dollars and before fees? At the end of January 2007, the money in the Barclay index would have grown to \$5,223, while the Stark-based investment would have climbed to \$3,444. By way of comparison, a portfolio of three-month Treasury bills would have climbed to \$2,611. Both the CTA indices have substantial survivor biases – all such indices do – which means we lose the results of the poorer performing CTAs and retain the results of the better performing CTAs. The performance of currency CTAs has been nothing short of horrendous.

#### \$10,000 December 1986 = \$1,000 \$1,000 Barclay Stark T-Bill \$100

## **Comparative Currency CTA Indices**

#### **CTA Index Performance**

Let's focus first on the Barclay index. Much of its gain, to \$2,534, was achieved in the first four years tracked. The large positive outliers of 1987 and 1990 in the histogram of annual returns have not been approached since. The Sharpe Ratio of this index underscores the appalling mediocrity of currency CTAs over time. The average monthly return has been 0.686%, with a standard deviation of 3.542%. Subtracting the average monthly return on three-month Treasury bills of 0.398% over this period and annualizing the results produces a Sharpe Ratio of .068. Treasury bills by definition have a Sharpe Ratio of 0.00. This is not much of a risk-adjusted gain over Treasury bills, is it?





The returns on the asset-weighted Stark currency CTA index are even more stuck in the Reagan administration. The combination of fiscal stimulus and tight money during those long-ago days of supply-side economics and a Federal Reserve fighting inflation aggressively created two massive dollar trends. The first, which began in 1981 and went through the first quarter of 1985, was a one-way affair: All any trader had to do was sell anything against the greenback. The annual returns for 1982 were 53.9%, -6.2% for 1983, 53.6% for 1984 and 49.3% for 1985. The second trend, selling the dollar, was referenced above in the context of the Barclay index.



Active Currency Management: The Stark Currency Traders Index

The longer history of the Stark index over some spectacular trading years is offset by a higher volatility involved for those returns. If we use the entire sample from 1981 forward, the average monthly returns are 0.964% with a standard deviation of 5.78% and a Sharpe ratio of 0.063. If we truncate the sample to match the Barclay index' 1986 start, the average monthly return falls to 0.513% with a standard deviation of 3.982% and a Sharpe ratio of 0.023. If currency CTAs do not find this last number embarrassing, they should.

#### **Style Indices**

As stock traders are fond of noting, it is a market of stocks and not a stock market; the author has arrived at a similar conclusion for long-only commodity indices. A fair objection at this point is both the Barclay and Stark indices

aggregate all manner of currency trading styles into one index and includes only those CTAs self-described as currency traders. Most CTAs diversify across markets and few eschew the currencies. This raises the interesting question whether investors should expect and indeed demand more from CTAs who claim a specialty. After all, isn't it reasonable for a cardiologist to be better at open-heart surgery than a general practitioner?

All is not lost. In the world of modern finance, we can expect to find an index and a performance benchmark for everything. Sometimes these indices are real, have long trading histories and underlie actual trading instruments such as index futures and options or exchange-traded funds. The presence of these indices and trading instruments alters the behavior of participants in the market; consider how a stock being added to the S&P 500 will jump in price as the indexers are forced to buy it.

Sometimes, as in the case below, these indices are hypothetical backcasts designed to describe something after the fact and perhaps get participants to think about trading styles and approaches in a different manner. Such is the case with a set of indices maintained by ABN-Amro for four different currency trading styles. These styles were described by James Binny of ABN-Amro in a Winter 2005 article in *The Journal of Alternative Investments* entitled "Currency Management Style Through the Ages." Let's use Binny's definitions without comment as given:

- *Value Forecasting:* This uses fundamental factors external to the currency market, such as relative inflation rates, bond yields or productivity growth to define an equilibrium or "fair" value of a currency as defined by the Purchasing Power Parity model. The trading style is simple: Sell the overvalued currencies and buy the undervalued currencies.
- *Trend-following:* The strategy employed here is a simple moving average crossover; when the five-day moving average exceeds the 40-day moving average, buy the currency and sell it when opposite. Simple filters, not described in the article exit extreme over-bought or over-sold positions and block entry in sideways markets.
- *Carry:* This strategy borrows (sells) low-yielding currencies and lends (buys) high-yielding currencies. The positions taken are proportional to the size of the interest rate differential relative to the average interest rate. The various convergence trades popular in European currencies prior to the advent of the euro (such as buying the Italian lira and selling the Deutsche mark) are excluded from the backcast as they no longer are available.
- *Volatility:* This strategy compares the implied volatility in each currency to its three-year average. If at the end of a month volatility exceeds this average, an at-the-money straddle is sold. The positions are re-evaluated monthly.

These styles were reconstructed from the end of 1986 and therefore match the Barclay Currency Traders index' lifespan. The returns are "pure alpha," or excess return to the risk-free rate. The chart below depicts the indexed returns for the Valuation, Trend-following and Volatility styles on its left axis and the Carry style on its right axis. Average annual returns are posted within the legend; for comparison, the average annual return on an index of three-month Treasury bills over this period was 4.88%.

#### Performance Of ABN-Amro Currency Style Indices



Over a 21-year period, the excess return for three out of the four trading styles underperformed the average annual return of the most commonly accepted definition of risk-free returns. The fourth style, the carry style now under scrutiny for those who worry about the yen carry or Swiss franc carry trades, outperformed Treasury bills, but only at the cost of a 68.6% retracement of gain between August 1992 and February 1993.

Most veterans in this business either have produced simulated trading records or have seen others' simulated trading records, or both. Let's just say a performance gap between real trading and simulated trading exists; you are free to decide in whose favor.

All of these trading records are before fees. If professional traders cannot outpace Treasury bills over a 21-year period, the U.S. government should start charging a hedge fund-like 1% management / 20% incentive fee for holding their paper. It is the ultimate principal-protected investment, after all, and advocates on both sides of the political aisle can claim credit for reducing the federal deficit therewith.

### How Do They Get Away With It?

It is somewhat amusing that in a world filled with self-styled investing mavens no one has executed a late-night infomercial extolling the virtues of opening a currency CTA. What an oversight: Any business capable of charging fees for delivering sub-Treasury bill performance for more than two decades and still both maintain customer loyalty and acquire new investors has a terrific business model.

Students of industrial organization might gravitate toward barriers to entry in such a business as an explanation for how it could continue. As the formal barriers to becoming a CTA are low, we must look to the informal barriers, such as the asset-gathering and fund allocation structure of financial intermediaries. If they do not raise money for new entrants, those new entrants will not be able to achieve the critical mass of assets under management required to stay in business. And as asset allocators have little to gain from risking assets on as-yet unproven traders – and much to lose if funds under management disappear as a result of poor performance – the safe course of action is to stay with established CTAs until and unless investors walk away in disgust. That has yet to happen.