Thoughts On Trading Systems

If you want a foolproof way of inducing a bitter laugh from a fund-of-funds manager, asset allocator or anyone else whose business involves shoveling money from investors to trading managers, just ask them, "Have you ever seen a *bad* simulated trading record?" The certain "No" does not mean they and everyone else have been duped by charlatans, Ponzi scheme operators or worse, it just means great work in trading laboratories has a way of getting chewed up and spit out in practice.

In a year when the MSCI World Free index returned more than 25% in USD terms, the Hedge Fund Research Global Hedge Fund and Systematic Diversified CTA indices returned 6.49% and -1.83%, respectively, before fees. I am willing to bet the hedge fund and commodity trading advisories put forth far more effort and brainpower than did the equity investors. Why, to paraphrase Churchill, have so many done so little for so much and have been able to keep the game going for so long?

Discipline Versus Learning

One obvious answer is conventional asset managers have the natural returns of their asset class working in their favor. No matter how idiotic their issue selection is, they are certain to receive the bond's coupons or stock's dividend and in the case of equities, they can ride the trend of long-term economic growth. Toss in some diversification here, a little closet-indexing there and one or two homeruns and you have an apparent winner. Forget all of the blather about, "We search for unloved/unwashed/unappreciated/undervalued medium-capitalization issues with mediocre management trading at below-market multiples with above-market volatility," the simple fact of the matter is almost any long-term disciplined approach will work for conventional assets.

If you move to the world of trading, you are betting on some combination of a skills and the ability of one approach to retain superiority over time. Both are Loser's Games as long-term records indicate. The key is to create a disciplined and mechanical approach capable of learning and adapting to changes in the market's landscape. This is similar to the biological imperative where every successful organism has to keep on adapting to both environmental and ecological changes.

Restated, the successful algorithmic approach of today has to prove itself anew every tomorrow. This is more difficult than it sounds. Anyone who thinks there is a fixed and universal black-box approach to trading system design is likely to discover otherwise the hard way.

Tools

I found the approach of Hood River Research to be in synch with this thought process; even better, you can download their ever-evolving software and get into what they call "trading system synthesis and boosting" yourself. The core principle involved developing market indicators, inherently backward-looking, and deploying them to predict target variables. Please note the objective function is not improved quality of fit, a trap so many designers fall into, but rather improved profitability. What good is a better watch if it cannot tell time accurately?

Confessional

I used to be involved and even obsessed with trading system design in a former life. It is truly a Sisyphean task and one with its own Loser's Game; whatever you do, you feel you can do better. It is like a never-ending princess-and-the-pea story; small modifications to improve X usually results in a negative outcome for Y and Z.

Was it a waste of time, something you should do with increasing enthusiasm as you approach your late 20s and then flee at an accelerated rate as you become older and allegedly wiser? No; anything but. I found the never-ending hands-on working with the data forced me to think about the market mechanisms and macro variables behind the price action. I think it is something anyone and everyone involved in trading and investing should do as part of their development.