JonesTrading

The Algo of Choice in Tough Times: The Human Equation

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Abandon hope, all ye who enter?

Dante begins the Divine Comedy by taking a journey though the rings of hell. By contract, Winston Churchill had healthier attitude about hell when he said: "When you're going through hell, keep going." These days can seem like we're closer to Dante but what we need is Churchill.

As over the past several years, and for the foreseeable future, the global economy overall, and markets in particular will remain uncertain and volatile. On the economic front, the U.S. government continues to try measures to stimulate the economy, in the context of a seeming paralysis between the executive and the Congress. The situation in Europe is working towards a bailout, but bailout represent interim saving measures rather than overall solutions. Economists are somewhat baffled as to what course will in fact work. Added to this are situations such as the UBS crisis, further eroding confidence when financial markets were under the impression that systemic risk had been somewhat addressed.

Regarding the equity markets in particular, volumes continue to decline. The World Federation of Exchanges reported a 9.3% decrease in equity trading volume in the Americas for the first half of 2011 compared to 2010. This decline would have been worse, but was offset by increases in volume in the BM&F Bovespa. Such declines may possibly tie to liquidity concerns–as investors who seek to trade may in fact have difficulty finding the other side–on either a natural or principal basis.

The volume issues are exacerbated by volatility in any given day or month, driven by outside extraordinary forces that impact markets. So, with the S&P downgrade of U.S. debt, equity market volume in August saw a substantial spike compared to July. Such roller coasters do not lead to market confidence for investors, who consistently seek stability if not predictability, tied to returns. That investor confidence has eroded is evidence by the substantial (though not record) outflows in mutual funds.

On the capital side, capital raised through equities have risen year-on-year by 74% to $125 billion in the U.S. This raise is deceptive, however, as many U.S. IPOs for 2011 are under water (even though their performance is better when compared to the overall market). The picture for turning to equity markets for capital is nuanced as well by the fact that firms of all sizes have moved private equity as a source of funding. The larger implication for the overall investor community and for the economy of this activity is that companies are beholden to a select group of shareholders focused largely on rapid return on assets. By contrast, when a company has currency derived from the larger investor based on the public markets, it is able to take a longer term view–if only because of the diversity of the investor base in terms of holding. Added to this picture is the fact that the public markets no longer serve the role as incubators of micro organizations.

Moving from this general picture, the structural and regulatory dynamics of stock exchanges have impacted the ability of traders to trade. Exchanges are publicly traded, and now act solely in terms of investor interest, as evidence by the recent fight between the DB and Nasdaq over the NYSE. As electronic entities, all markets have become order driven, with the curious notion the HFTs are the new market makers. Yet, there is a substantive difference between the prior model of a market maker in an order driven market, who set two sided markets, and an HFT liquidity provider who is larger opportunistic. Price driven markets have essentially ceased to exist.

On the regulatory side, the systemic risk mandates of the Dodd-Frank legislation are being implemented by the SEC. Most immediately the effects are bring felt by hedge funds in developments such as Form PF, but as the consumer aspects of the legislation are implemented, all market participants will likely feel the effects.

The Human Equation: Now more than Ever

Psychologist BF Skinner set the problem this way: “The real problem is not whether machines think but whether men do.”

Given the rather bleak economic and market picture, institutions and hedge funds are still driven by the need for performance, This has not changed, and it has become more difficult in today’s markets. Especially as institutions continue to rely on automated mechanisms, be they algorithms, dark pools and other “thinkless” mechanisms, securing performance in thin and volatile markets is exacerbated.

Tied to this is the loss of control over orders. Routing mechanisms do not necessarily assure best ex. This is because performance in difficult to trade situations cannot be automated, but in fact relates to market expertise that cannot be encoded. Best execution relates to the ability to make judgments and decisions about the facts and circumstances of a trade, and relates directly to execution quality.

Take for example the recent move by some dark pool entities to move to a have price-size rather than price time priority in execution. Such a move is a recognition of the fundamental nature of institutional trading: that traders can be patient and that size is more important than time in execution. This development bears out the research that Robert Schwartz of Baruch conducted in the 1990s around issues of patience, transparency, price, size and time for institutional trading decisions.

Have the dark pools thrown in the towel? Or is the assertion that the shift reflects a sophistication that the dark pool model has not previously delivered? And which trader would like to be the first to experiment? Either way, something is up.

The simple fact is that machines, be they driven by HFT computers or dark pool algos have yet to evidence the same judgmental capacity to secure performance or best execution in the kinds of markets we now experience that people can and do–and that is because the number of variables can neither be predicted nor accounted for regardless of how sophisticated the math.

Where does that leave traders in terms of performance and best ex, and the related issues of expertise and execution quality?

The simple fact is that machines cannot replace people in today's environments. Part of the skittishness that institutions have is that there is little confidence that the markets can perform on their behalf because machines cannot understand issues such as overall intent, as well ass all of the other variables that constitute organic trading. To secure expertise and quality in unpredictable environments learners are required…and learners over time become experts.

In the 1960s the tag line for IBM was "THINK". Curiously, this tagline was not about the IBM machines, but challenged the people who used the machines. That dynamic in today's trading has to some extent been turned on its head. On the one hand there is little confidence that the commoditized algos delivered by machines can secure a trader's desired outcome and yet the representation is that they can.

So what is a trader to do?

This first order of business is to develop proper criteria for decision making as to where a trade needs to be sent. These criteria can be developed in response to a series of questions such as:

Where can I secure market expertise that can aid in the decision regarding timing, intent and other intangibles not accounted for in machine based trading?

Who can offer market color in real-time that might influence my decisions?

Where can I secure liquidity that is pent up and not displayed?

Where can I find a broker environment tied solely to my interests?

Where can I secure liquidity in thinly traded instruments?

How can I maintain control over the trading process so as to secure an opportunity for best execution, and to catalog that decision making in the event of an inquiry?

How can I secure advantageous prices on a block?

Interestingly enough all of these decision making categories and the attendant effect they have on performance and best execution relate not to trading process but to thinking about trading effectiveness…in other words, absent human interaction, they cannot be approached, much less answered.

Firms such as JonesTrading are designed as a human network first, backed by best of breed machine trading and independent third party research capability. The full range of trading is aided by commission management programs, secondary capital markets capability, and trading globally in a variety of asset classes.

Especially in these times, the human equation is the algo of choice.