Common Miscalculations in Futures Trading

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In the article, "Commodity Derivatives Risk Management: The Differing Priorities among Commercial and Speculative Enterprises", Till (2017) notes how one common mistake in futures trading is targeting absolute returns rather than risk and the disastrous consequences thereof. This article describes two other frequent mistakes: (1) the use of inappropriate sizing and (2) a misunderstanding of the psychological discipline required for futures trading.

Inappropriate Sizing

Interestingly, natural gas seems to frequently be at the center of many trading debacles. Natural gas derivatives trading offers traders and investors a potentially alluring combination of scalability and volatility, and also at times, pockets of predictability.

Even with the natural gas markets, a surprisingly common mistake has been adopting the appropriate sizing for trading this seemingly scalable market. This has been a key lesson from several publicly known hedge fund natural gas trading disasters.

The commodity markets do not have natural two-sided flow. For experienced traders in the fixed income, equity, and currency markets, this point may not be obvious. The commodity markets have *nodal liquidity*. If a commercial market participant needs to initiate or lift hedges, large-scale transactions will take place, but not at a speculator's convenience. Before initiating a position, particularly one that is large compared to the size of the marketplace, a trader needs a clear understanding of what flow or catalyst will allow the trader out of a position.

A commodity-market observer can readily identify when a massively-sized distressed liquidation is occurring, particularly in a spread market. If no geopolitical, economic, or weather news exists about a market, and a spread relation changes by many standard deviations relative to recent history, this combination is a clear signal that a market participant is unwinding a position in a distressed fashion. In summary, a key risk-management objective in speculative commodity futures trading is to keep sizing within a relatively small fraction of daily trading volume and open interest. Apparently, this can be a difficult restriction for futures traders to live by when prior success brings an influx of capital that is beyond what a commodity trading program can nimbly manage.

Psychological Discipline and Risk Tolerance

In discussing the crucial elements of an investment process, a common mistake is to leave out one vital aspect of trading, and that is a manager's *risk tolerance*. Vince (1992) states that monetizing market inefficiencies "requires more than an understanding of money management concepts. It requires discipline to tolerate and endure emotional pain to a level that 19 out of 20 people cannot bear. Anyone who claims to be intrigued by the 'intellectual challenge of the markets' is not a trader. The markets are as intellectually challenging as a fistfight. … Ultimately, trading is an exercise in self-mastery and endurance."

In futures trading, psychological discipline is just as crucial as finding structural sources of return and designing an appropriate risk management methodology around them. Taleb (2001) explains why following a disciplined investment process is challenging for a manager. He provides an example of a return-generating process that has annual returns in excess of Treasury Bills of 15 percent with an annualized volatility of 10 percent. At first glance, carrying out a trading strategy with such superior risk and return characteristics might be considered trivial. But Taleb also notes that with such a return-generating process, only a 54 percent chance of making money exists on any given day. If the investor felt the pain of loss say 2.5 times more acutely than the joy of a gain, then it could be potentially exhausting and perhaps almost impossible to carry out this superior investment strategy.

Conclusion

Gaining expertise in the commodity markets usually occurs through trial-and-error experiences, some of which can be quite painful. The goal of this article has been to provide readers with two cautionary examples so that they will hopefully not have to learn these lessons through the "school of hard knocks."

Endnote

This digest article was excerpted from the author's seminar on "Risk Management and Case Studies in Commodity Trading," which the author provided to staff from the Zhengzhou and Dalian Commodity Exchanges (of China) on October 17, 2017 in Chicago.

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Keywords

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