

THE ROLE OF THE FUND SECTOR IN RECENT COTTON FUTURES VOLATILITY

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Background

The purpose of this article is to discuss the influence of the speculative funds on the cotton futures market. The last decade saw the rise of speculative investment funds as participants in the Intercontinental Exchange (ICE) futures exchange and other commodity exchanges. In particular, the net long position of the index fund sector has grown substantially since 2001 in many commodity futures markets (Jakab 2006). The volume of contracts bought and sold by speculators has fluctuated considerably in recent years, at times associated with record prices (Figures 1, 2) and record levels of open interest (Figure 3). Coincidentally, two major cotton price events stand out in recent years. First, the U.S. cotton futures market experienced a notable upward price spike in March 2008, which brought industry, media, and government attention to the influence of speculation in this market (Davis, 2008). Second, cotton futures prices began a steady unprecedented price rally in the fall of 2010 to over \$2.00 per pound by early 2011.

Prior Study

There has been a small amount of published research on the relationship between institutional speculators and cotton futures price behavior. Reddy et al. (1999) found some evidence of a causal relationship between the aggregate speculative net long position and nearby cotton futures price. More recent studies by Power and Robinson (2009) and Aulerich et al. (2010) failed to find any direct evidence that the 2007-2008 cotton price behavior was caused by the more passive buy-and-hold institutional ("index fund") traders. Lastly, a staff report by CFTC (2010) assigned mainly a background role to the fund sector in the events leading up to the price spike of March 2008. This latter study was based on examination of the trades of different market participants, and highlighted the role of commercial merchants attempting to unwind their short hedge positions. Lacking direct evidence of either causality or a significant determining relationship, what has been the role of speculative funds in the movements of cotton futures prices?

Data

There are two sources of publicly available information that can help answer this question. These data sources represent different snapshots in time of the net position of speculators in the market. By "net position" I mean the aggregation of long and short speculators into either a positive net long position (i.e., more speculative buyers than sellers) or the reverse with a net short position. The first weekly data snapshot is the CFTC's Commitment of Traders report, which is released

on Friday and reflects the previous Tuesday's net position (Figure 1). Note that the CFTC data are reported in contracts (roughly 100 bales per contract). The CFTC data in Figure 1 is also unique in that it splits out the passive, long-only index funds from the trend-following hedge funds. The second snapshot is the ICE futures exchange Spechedge report, which is released early in the week, and reflects the net position of both classes of speculators, as of the previous Friday (Figure 2). The Spechedge data are reported in bale units, i.e., bales worth of contracts.

Observations

Both Figure 1 and Figure 2 graph cotton prices over the 2008 and 2010/11 phenomena. Both graphs clearly illustrate the short-term price spike in March 2008 and the longer term rally to record prices in 2010/11. As previously reviewed, the preponderance of evidence does not indicate that the price spike was caused by the actions of speculative funds. However, the run up to the March 2008 price spike is clearly characterized by a build-up of the index fund position during 2007 and early 2008 (Figure 1). In addition, the latter half of 2007 and early 2008 saw a fluctuating but positive net long position by the trend-following hedge funds. This represents somewhere between ten and twenty million bales worth of cotton futures contracts being bought by the fund sector. This level of buying is associated with a rising price trend all during 2007 and early 2008. It is this background of rising cotton prices, doubtless facilitated by fund buying, which reportedly led to the rush of commercial unwinding of short hedges in early March 2008, and thus precipitated both a price spike and a financially critical situation (CFTC,

Figure 1. Cotton Futures and Total Net Position of Funds

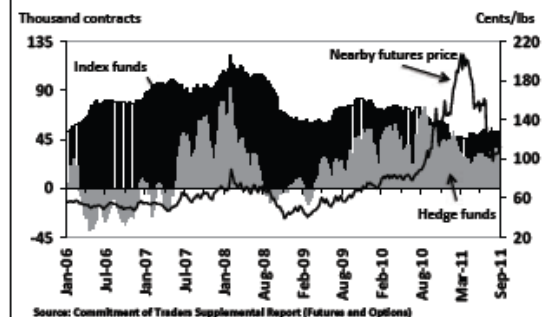
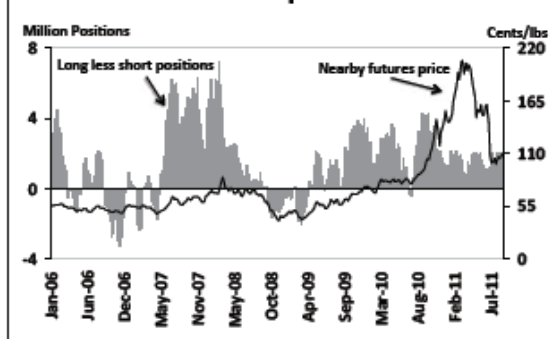


Figure 2. Cotton Futures and Total Net Position of Speculators



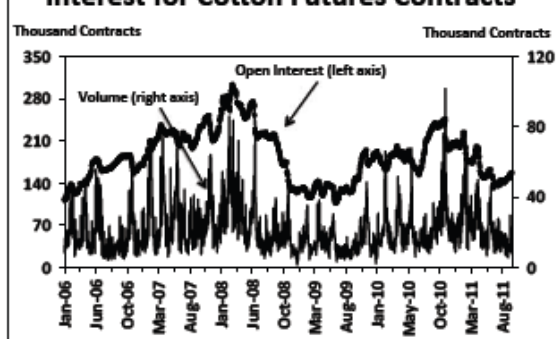
2010). The point is that the fund sector at least had an indirect role in contributing to the events of March 2008. There were likely other contributing factors such as confusion about ICE futures daily margin levels, uncertainty in the context of a completely electronic/anonymous futures trading platform, and a tightening of available credit to merchants.

The events of 2010/11 also and perhaps more clearly, point to the fund sector acting as a catalyst to the more direct actions of the commercial sector. Figure 1 shows a level-to-slightly declining index fund net long position in the second half of 2009 and the first half of 2010. The same graph shows a fluctuating but increasingly positive net long position for the hedge funds. This coincides with a period of renewed commodity speculation in agricultural futures markets culminating with the Russian wheat export ban and the Pakistani flood events (circa August 2010). Nearby cotton futures prices were just beginning to breach levels of “resistance” between 80 and 100 cents per pound. As the rally to record prices commenced in September, the net long positions of both fund types diminished (Figure 1). This fits an explanation of the fund sector acting as an early catalyst. The drive to record futures prices was reportedly more a phenomenon of panic buying in cash markets. In contrast to 2008, the 2010/11 commercial buying was reportedly driven by mills instead of merchants.

Summary

Research shows that speculative funds have influenced near term prices in the past (Reddy et al, 1999). Their future role in directly influencing agricultural markets will likely be a continuing empirical question. In the meantime, large scale

Figure 3. Daily Volume and Open Interest for Cotton Futures Contracts



buying of cotton futures by the fund sector has also appeared to have a more indirect role as a catalyst to the commercial sector. Perhaps this hypothesis could be formally tested by properly relating the net position of speculators to those of the commercial hedgers and prices.

References

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