The Diversifying Power of Chinese Futures Markets

London (HedgeNordic) - Institutional investors who started allocating to equities in mainland China have increasingly diversified into government bonds, corporate credit and the growing menu of commodities including some unique markets. A systematic long/short approach can provide further diversification and generate returns with virtually no correlation to Chinese or global financial markets.

Aspect Capital has been applying its models to Chinese markets – predominantly commodities – since 2016, and has shown a slightly negative correlation to Chinese equities – and a near zero correlation to the Bloomberg commodities index.

"We have been accessing onshore Chinese futures markets in conjunction with a local partner since 2016, which has provided insights into the quirks of Chinese futures markets, and we are now getting ready to launch an offshore pure China fund," says Razvan Remsing, Director of Investment Solutions at Aspect.

The onshore China programme has generated a Sharpe ratio around one, with especially strong performance in 2016, 2020 and 2021. Aspect's new offshore Chinese CTA strategy will trade mainly commodity futures and also some equity indices and government bonds, all of which are exchange listed futures. (Aspect does not trade single name equities or corporate bonds in China, and the Chinese currency is actually traded in Aspect's other programmes, as are equity indices outside the mainland, such as Hong Kong's Hang Seng). In total, Aspect will trade around 45 Chinese futures contracts of which 5 have so far been internationalized.

They will trade on the China Financial Futures exchange and three commodities exchanges: Dalian, Zhengzhou, Shanghai, and its child exchange, the internationalized Shanghai Energy Exchange. These contracts will be accessed through swaps, which have become much cheaper over the past few years.

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Aspect also hopes to obtain a QFI license for direct access. A growing proportion of Chinese futures are expected to become QFI-eligible, which should further reduce trading costs. "Overall costs in China's deep and liquid futures markets should eventually be comparable to global commodity markets," says Remsing.

Diversification

Chinese futures recently appear to have generated stronger trends than global futures. "But our research over longer term lookbacks does not find that the persistence of trends is significantly distinguishable from traditional futures markets. The real benefit lies in superior diversification. Markets in China are so diverse and idiosyncratic, covering such as wide range of assets and industries, that pairwise correlations are much lower than on either global commodity futures or global financial futures," says Remsing.

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The diversification benefit of unique Chinese futures is perhaps fairly obvious. Markets such as apples, eggs, bitumen, polyethylene, PTA, and deformed bar are not traded on other futures markets. Yet some local Chinese versions of global commodities already offer some diversification benefit.

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Transport and storage can explain some divergences for non-perishable commodities, and the differences can be even greater in agricultural markets. "For agricultural and perishable commodities, harvests and weather conditions can contribute to divergent performance even for namesake counterparts. For instance, corn in China has only been about 0.3 correlated with US corn," says Remsing, who sees potential for more namesake commodities to provide diversification benefits in future. "Even where Chinese commodities, such as copper, are currently highly correlated with global markets, there could be scope for them to decouple in the future. The local Chinese versions could become competing benchmarks, and might sometimes diverge just as Brent Crude and WTI Oil do," says Remsing.

Tailoring Models to China

Some Chinese CTA programmes are purely trend. Aspect's is substantially trend, but also uses some non-trend models, and all of these models have been somewhat adapted to the unique features of Chinese markets.

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"Trend is broadly the same signal architecture but is run faster, with risk positioned differently in terms of mapping, position building, holding periods, and exiting the trend. We have China-specific forecast mapping functions. We run trend models in China slightly faster than in other regions, though they broadly remain within the medium-term trend following category and are much longer term than the models in Aspect's dedicated short-term trading strategies. They seek to capture directional effects lasting longer than about 1 month rather than a handful of days," says Remsing.

Faster trends could be partly explained by lower open interest and greater retail participation in Chinese futures. "Lower open interest as a percentage of average daily volume generally gives shorter lived trends."

Liquidity needs to be closely monitored: "the ratio of open interest to ADV is less stable than in more developed markets, which means that some markets might fluctuate in capacity quicker," says Remsing.

Carry, Term Structure, Sentiment, and Inventories

Non-trend models include term structure and sentiment.

"Term structure is partly implicit in trend following models based on total returns, but there are also explicit non-trend models looking at term structure. Carry and term structure estimates in Chinese futures markets are somewhat noisier due to data issues. Carry is partly mixed up with seasonality which can dominate the carry signal. We do not actually trade outright carry in China but we have developed techniques to infer sentiment from term structure data," points out Remsing.

Some models that Aspect utilizes within its alternative markets programs have worked really well in China, but their calibration and parameterization are unique to China. There are also some fundamental models based on inventories, which are completely different from Aspect's quant macro models based on fundamental economic data.

Key Contributors

Aspect's China models have profited from both long and short positions during iron ore's V shaped performance this year. Thermal Coal has also been a substantial contributor.

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"There have also been powerful themes evident in China, which entered the pandemic and restarted before other regions. China's recovery based on stimulus and infrastructure spending has supported multiple commodity markets," says Remsing. The strategy was mainly long of Chinese commodity futures in the first half of 2021 but has top sliced some exposures as volatility increased and has started to add more short exposures. "As of September 2021, it was short 15 of the 45 markets traded, including iron ore, lead, glass, softwood pulp, eggs, corn starch and apples. It remains long of contracts in the energy complex such as crude oil, coal and methanol, plastics, as well as copper," says Remsing.

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Not all markets have offered profitable opportunities, however. "Agricultural markets have been very choppy, especially in the soybean complex, and rapeseed oil," he adds. This is to be expected in a mainly trend following strategy, since not all markets will show clear trends in any year.

China clearly offers a new frontier of opportunity for CTAs to find new sources of diversification.

This article featured in HedgeNordic's "Quant Strategies" publication.