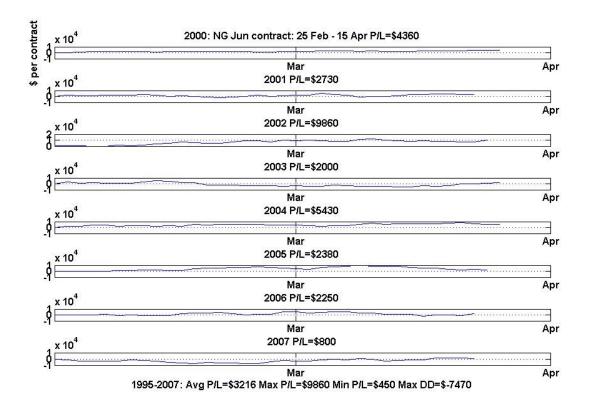
A seasonal trade in natural gas futures

By Ernest P. Chan, Ph.D.

May 7, 2007

As the summer season approaches in North America, natural gas demand goes up due to increasing demand from power generators to provide electricity for air conditioning. This suggests a seasonal trade in natural gas where we long a June contract of NYMEX natural gas futures (Symbol: NG) at the close of February 25 (or the following trading day if it is a holiday), and exit this position on April 15 (or the previous trading day if it is a holiday). This trade has been profitable for 13 consecutive years. I learned of this trade in January 2006, and therefore to me, 2006-7 are out-of-sample periods, while to the readers of this article, true out-of-sample testing has to begin in 2008. Here is the annual P&L and maximum drawdown of this trade:

| Year | P/L | Maximum Drawdown |
|------|---------|------------------|
| 1995 | \$1,970 | \$0 |
| 1996 | \$3,090 | -\$630 |
| 1997 | \$450 | -\$430 |
| 1998 | \$2,150 | -\$1,420 |
| 1999 | \$4,340 | -\$370 |
| 2000 | \$4,360 | \$0 |
| 2001 | \$2,730 | -\$1,650 |
| 2002 | \$9,860 | \$0 |
| 2003 | \$2,000 | -\$5,550 |
| 2004 | \$5,430 | \$0 |
| 2005 | \$2,380 | -\$230 |
| 2006 | \$2,250 | -\$1,750 |
| 2007 | \$800 | -\$7,470 |



The maximum P&L is \$9,860, the minimum P&L is \$450, the maximum drawdown is -\$7,470, while the average of the maximum drawdown is -\$1,500.

Natural gas futures is notoriously volatile, and we have seen big trading losses for hedge funds (e.g. <u>Amaranth</u>, loss=\$6B) and major banks (e.g. <u>Bank of Montreal</u>, loss=\$450MM). Therefore, one should be cautious if one wants to try out this trade – perhaps at reduced capital using the mini QG futures at ¼ the size of the full NG contract. One possible way to utilize this QG futures is to buy 1 contract at the entry date, and purchase another contract if the drawdown reaches the average value (-\$1,500/4), and so on.

Reference

"Fill 'Er-Up! Benefit from Seasonal Price Patterns in Energy Futures" by Jerry Toepke at SFO Magazine.

Disclaimer

This research is for informational purposes only, and is not a recommendation to buy or sell any securities mentioned. As always, past performance is no guarantee of future results!

Dr. Ernest P. Chan is a quantitative consultant who helps his clients implement automated, statistical trading strategies using Matlab. His office is located in Toronto and can be reached through www.epchan.com.