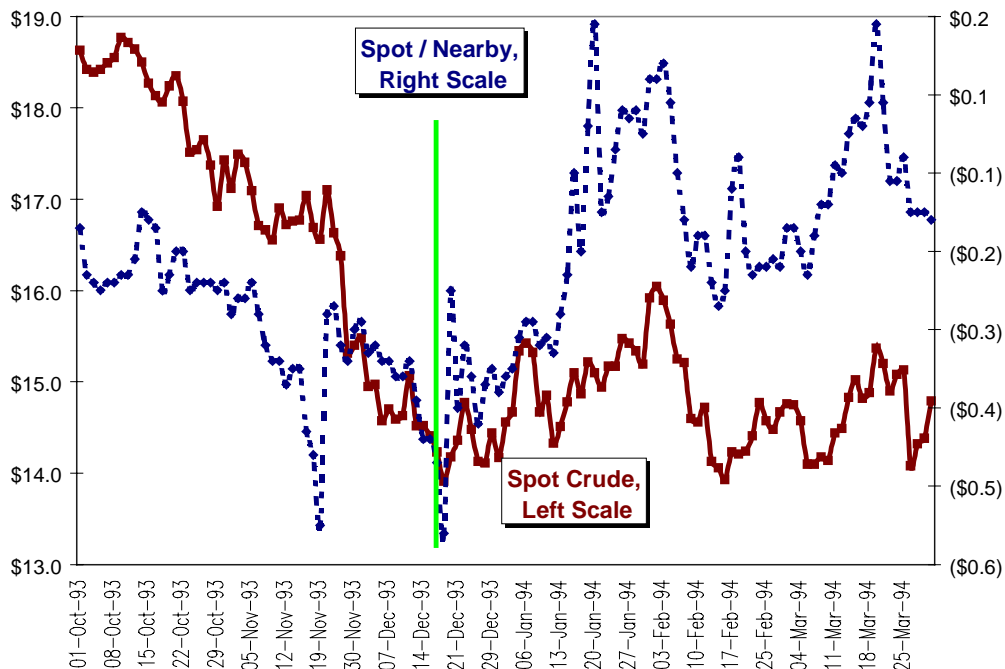


Another Crude Comparison

The parallels between the crude oil market of 1993-1994, and the crude oil market developing in 1997 were apparent by July 1997 (see "A Crude Comparison," *Futures*, September 1997). While these parallels in both price and the intermonth spread were by no means deterministic in producing the collapse in crude oil seen through March of 1998, they did imply the presence of certain fundamental factors, such as abundant supply.

Every price collapse sows the seeds of a subsequent recovery; nothing goes down in price forever in the absence of technological change. Extreme price moves, both up and down, alter the behavior of both buyers and sellers. The low point of the 1993-1994 cycle occurred at the expiration of the January 1994 contract. While the absolute price of the spot contract rose only slightly from this level, the contango contracted sharply and soon turned into backwardation.

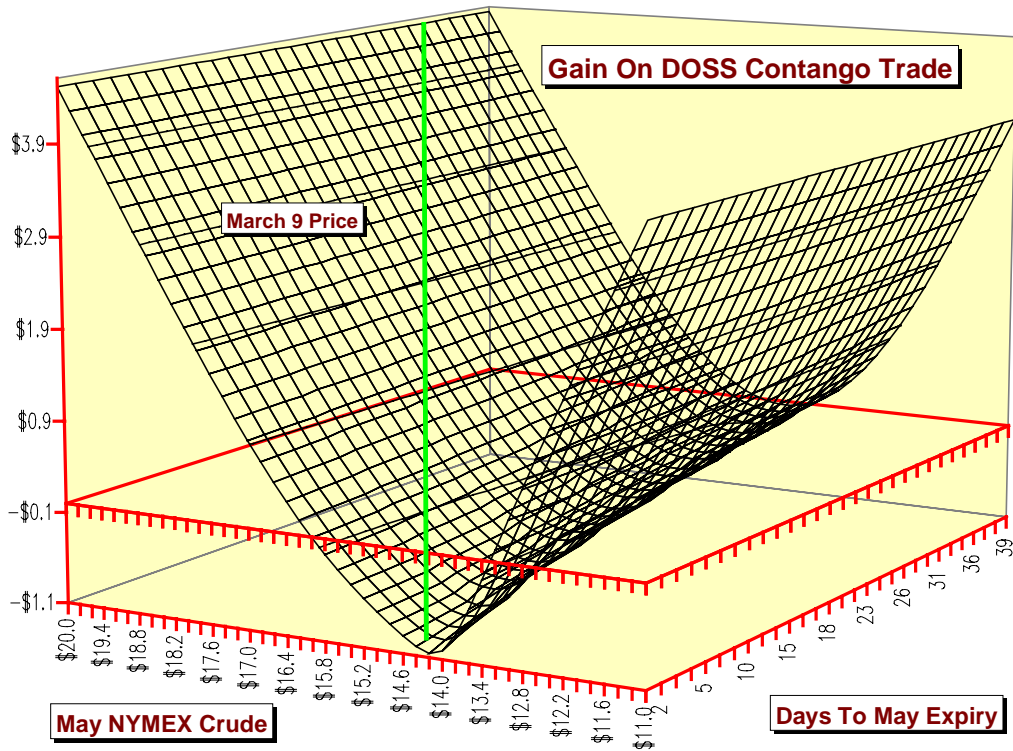
The Low-Point Cycle Of 1993-1994



Bottom-picking is generally a fruitless exercise, even for a commodity such as crude oil with a pronounced tendency toward spike bottoms. Is there any way to convert a foray into the long side in a lower-risk manner, one that would involve exposure to both the ordinal price movement and the intermonth spread? The Dynamic Option Selection System (DOSS, see "Using Options The Spec Way, *Futures*, July 1994) produced the following trade for buying May and selling June crude oil 100 times using data from the close of business on March 9, 1998:

[Long May] Buy 225 May \$14.00 calls at \$1.06 and sell 100 Jun \$15.00 calls at \$0.84
[Short June] Buy 155 June \$16.00 puts at \$1.26

Two views of this trade are presented below. The first is the profit profile across the dimensions of May price and time remaining to the expiration of the May options, with the May/June spread held constant. The profile has steeper sides and a more modulated time decay rate than a classic straddle.



A second, and more interesting, view is made across the dimensions of May price and the May/June spread at the expiration date of the May options. As in the case of a straddle, the worst case occurs at static prices, but even at static prices, the losses are minor unless contango worsens. Since contango has a set of bounds defined by cash-and-carry arbitrage, (see "If The Sky's Not The Limit, What Is?", *Futures*, this issue) we know this risk is not open-ended. Moreover, deepening contango is generally accompanied by declining ordinal price, which in turn lessens the maximum loss of the trade. A combination of higher prices and deep contango, which occurred after the 1993-1994 bottom, would be profitable.

