Metallgesellschaft and the Economics of Synthetic Storage

By:

Christopher L. Culp and Merton H. Miller.

Nicholas Lyle

A01757213

Metallgesellschaft(MG) refining and marketing was a branch of the parent company from Germany. They were a major player in the derivatives markets in the US providing contracts on energy products like gas and heating oil as far as ten years out. They dealt in futures contracts as a form of hedging. The company would roll over their future-delivering obligation. There were some market events that happened that eventually made them shut down the firm. They engaged in a strategy of synthetic storage. They would buy futures contracts and roll them over from month to month without taking ownership of the physical asset. The purpose of this paper explains why this strategy is very costly but not inherently unprofitable.

MGRM would hedge their long dated delivery obligations with shorter future contracts that equal their obligation to deliver in the future. This form of hedging doesn’t get rid of all the risk they faced in the markets they were dealing in but when they roll over their obligations from month to month there can be favorable market conditions for profits. Even though they don’t seem fully hedged on paper they are participating in a one to one hedge.

The benefits of synthetic storage are apparent. Using this strategy their biggest advantage was they eliminate storage costs. This is beneficial for any company that projects that their marginal cost of storage is higher than the embedded premium in the future price.

In the end the authors of this paper caution firms who would think of taking on this type of strategy. In the end it seems more like a speculation on what the market conditions are instead of a hedging strategy. If market conditions are not optimal this strategy is can be very draining on a firms cash.