

Market Profile as a Decision-making Tool for Hedgers of Agricultural Products

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Abstract

The Chicago Board of Trade Market Profile (R) and Liquidity Data Bank (R), and the Chicago Mercantile Exchange Volume (R) are recently-introduced real-time data bases that involve futures price and volume. Since these data bases can be of assistance to buyers and sellers of agricultural products who wish to utilize hedging as a risk-management technique, courses related to these data bases can now be a relevant part of agriculture curriculum.

Introduction

With the availability of the Chicago Board of Trade Market Profile (R) and Liquidity Data Bank (R), and of the Chicago Mercantile Exchange Volume (R) from several vendors of market information, the public now has access to market-generated information which previously has been available only to floor traders. While this approach to trading--that is, the discipline popularly known as "market profile" -- has been popular among floor traders for decades, it is now gaining acceptance by institutional traders, brokerage houses, trading advisors, the general public, and the academic community. Since 1987, Western Illinois University has been the premiere university teaching market profile as part of curriculum; the Department of Agriculture offers two agricultural economics courses that are concerned with the discipline, as well as with its use for hedging and speculation.

An agricultural-product buyer or seller who implements a multiple hedging program, utilizes price outlook to determine the timing of placing and lifting hedges; price outlook can be derived from fundamental analysis, technical analysis, and/or market profile. On the one hand, both fundamental and technical market analysis involve the projection of historical data; on the other hand, while market profile is a form of technical analysis in that it is concerned with both price and volume data, the data base is on-line real-time, and represents the current situation rather than the past.

The purpose of this paper is to explain the relevance of market profile courses to an agriculture curriculum. Additionally, this paper reviews the potential use of market profile as part of a hedging program.

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Multiple Hedging

A producer of agricultural products would enter into a multiple hedge by taking a short futures position, if and only if the outlook is for the product price is to decline. Then--after the hedge is in place--if price outlook suggests that the market has bottomed, the hedge would be lifted by offsetting the futures position, thereby retaining a flat long position in the cash market. Once lifted, the hedge would again be put on, if and only if the outlook is for price to again go against the cash position. Thus, a multiple hedge may be placed and lifted several times before and/or during the growing season and/or storage period (Drinka 1985; Drinka et al. 1985; Drinka, Strudeman, and McGinn; Purcell, as well as Teweles and Jones refer to the strategy as "selective hedging"). A multiple hedge accompanying a short cash position would be implemented analogously.

The risk-management of a multiple hedge is concerned with the timing and price level of trade placement. The hedger could use market profile (Drinka et al.: December 1987, January, February, March, and December 1988, and April 1989) to attempt to achieve "free exposure": that is--in the context of both placing and lifting the hedge--the ability to scratch the trade, if one's price outlook was incorrect in retrospect.

Market Profile

The dissemination of commodity market information has evolved dramatically over the last four decades. Fundamental data and analyses have been routinely published by various government agencies and private companies since the 1940s. Since the 1970s, with the proliferation of microcomputers, traders have increasingly relied upon technical analysis. Then, the CBOT Market Profile (R) and LDB (R) became available to the general public in 1984, while the CME Volume (R) became available in 1989.

With the development and dissemination of the market profile format by the Chicago Board of Trade and the Chicago Mercantile Exchange, the general public now has access to market-generated information which had previously been available only to individuals who trade on the floors of futures exchanges. Hedgers and speculators who trade away-from-the-floor can now, therefore, gain nearly as much insight and understanding about the market, as can individuals who trade on the floor.

Both fundamental and technical market analysis involve the extrapolation of historical data. The "market profile and liquidity data bank are, in effect, technical information; but they are drawn from a different data base from other forms of technical information. Here the data base is evol-

ing on-line, and the data represent the current situation rather than the past" (Steidlmayer, 1989, page 62). Thus, the multiple hedger using market profile is on-line real-time (the Western Illinois University Department of Agriculture has access to this data base via CQG's System One); this approach to hedging is very aggressive, and very responsive to evolving market conditions.

A Commodity Marketing Curriculum

The Western Illinois University Department of Agriculture offers six economics courses that are related to commodity marketing and futures/options trading. AGECE 333 stresses the fundamentals of corn, soybeans, wheat, hogs, and cattle; additionally, the relevant U.S. Department of Agriculture reports are considered. AGECE 442G and 447G are companion courses: the former is related to basis hedging, while the latter is related to the use of technical analysis for multiple hedging and speculation. AGECE 455G stresses the use of options on futures for hedging and speculation. Finally, AGECE 457G and 458G provide instruction in market profile.

In AGECE 457G, the student is taught the market profile format, which consists of 12 specific calculations and analyses. Each of these 12 items provides insight as to whether the market of interest will be higher-to-unchanged or lower-to-unchanged during the following trading session; this assessment of market direction can assist a multiple hedger relative to the timing of hedge placement. In AGECE 458G, students meet daily to simulate trades using the market profile format; in this fashion, they are able to learn the application of the format, since our price quotation terminals are on-line real-time.

The CBT Commodities Institute

In 1991, the senior author of this article developed a market profile course for the Chicago Board of Trade Commodities Institute; this course is virtually identical to AGECE 457G; students have included floor traders, independent traders, trading advisors, fund managers, employees of financial institutions, as well as the general public. In 1992, the senior author went on-line at the Institute with a second market profile course, this one similar to AGECE 458G. Thus, the manner in which market profile is currently part of the Chicago Board of Trade Commodities Institute's curriculum, is identical in philosophy to the manner of instruction at the WIU Department of Agriculture.

Summary

Market profile can be utilized to assist hedgers of agricultural products. Thus, courses related to the discipline can be a relevant part of an agriculture curriculum.

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