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## IMPORTANCE OF THE FUTURES MARKETS FOR CROATIAN TEXTILE INDUSTRY

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**Abstract:** *Central role of commodity exchanges is neutralization of financial and commodities price risk, providing effective risk management tools for basic industries and earning opportunities for well-informed investors. Conducting interview with managers in Croatian textile industry led to the conclusion that there was insufficient knowledge of futures trading techniques and opportunities. This paper analyse basic prerequisites for commodity trading, followed by cotton market analyse. For over a century cotton industry participates at futures and options market to engage in cotton price discovery and price risk transfer. With respect to pricing role of commodities exchange, this paper analyse hedging opportunities in Croatian textile industry.*

**Key words:** *futures market, hedging, cotton futures*

### 1. INTRODUCTION

The modern commodity markets developed from the trading of agricultural products. Today we can sell or buy almost everything, such as gold, oil, cotton, silk, coffee, orange juice, derivatives or options. Futures trading began during the America Civil War. Prices of grain and cotton were very unstable. Therefore, in 1865 The CBOT (Chicago Board of Trade) began collecting initial and variation margin to make sure that speculator fulfilled their obligations (Braudel, 1992). Futures markets were widely accepted with establishment of CBOT and introducing opportunity to offset futures contracts obligations. Trading on the futures market is governed by rules and regulations set forth by the exchange. Prerequisites for future and option trading are contract standardization, opportunity to offset obligation and margin system (Andrijanić, 2002). The futures exchange determines the daily settlement price for each contract traded. The Clearing House is responsible for collecting the initial margin from each buyer and seller and collects/pays out variation margin every day. It is also responsible for organizing delivery of goods and payments. Daily cash settlement rule allows the traders to withdraw any profits from his futures trading on a daily basis.

Futures markets help to determine price for a commodity, they are indicators of the market balance, and the most important they allow hedging. A future is a legally binding contract to deliver on a specified date of a given quality and quantity of a commodity at an agreed price (Bernstein, 1989). The CBOT introduced future contracts in 1865. and in 1870. New York cotton traders organized The NYCE (New York Cotton Exchange). The addition of options on cotton futures at The NYCE happened in 1984 (Navarro, 2004).

The price fluctuations of a basic commodity can still shock the economy of a country or an entire region. The price of the latest yield of the citrus grove or the cotton field matter a great deal. One of the price risk elimination tools are futures market instruments, where buying or selling future contract, transfer risk from producers to the professional traders, speculators. Therefore, futures market provides information on future prices for traders and producers on the spot markets. While producers

are able to transfer their risk, they can effectively plan and reduce operating costs. Final user of the future market is buyer, who pays lower price for certain good (Achelis, 2007). Hence, this paper analyse possibilities of Croatian textile industry to hedge against price movements. It is important to point out certain limitations of this approach. Croatia does not have commodity exchange, so companies should hedge at foreign exchanges. This can be expensive and impossible for small companies, mainly because traders have to sell or buy at least one contract that is 50000 pounds net weight. Idea is that textile companies should join and hedge together as an association.

### 2. COTTON MARKET ANALYSE

The traders make the decision about what, when, and how to trade, using either fundamental or technical analysis. Both forms of analysis involve looking at the available information and making a decision about the future price, but the information that is used is completely different. Fundamental traders use information about the global and national economies, and the financial state of the companies involved, as well as non-financial information such as current political and weather information. They believe that the markets will react to events in certain ways and that they can predict future market prices based on these events. Technical traders use trading information along with mathematical indicators to make their trading decisions. This analyse simply use available information on prices and trading volume. Based on that information analytics create graphs and construct different technical indicators such as moving averages, oscillators etc.\* Technical analyse is based on three facts: (Lazibat, Brizar, Baković 2007) all of the information about the market is already included in the price movement, price movements are following trend and history have repeating tendency.

Croatian textile industry is connected with the beginning and development of that industry. The textile and clothing industry participates in total Croatian exports with 5.8%, but these exports are mostly based on services with very low prices. The overall importance of Croatian textile industry is based on facts that it employees large share of total employed workforce as well as its considerable contribution in foreign trade of the manufacturing industry. Textile industry faces strong competition in domestic and foreign markets, so industry management should create preconditions for reducing manufacturing costs and developing innovative brands.

In the past several years, textile industry has faced difficulties in its activities, marked by seasonal fluctuations. Orders by foreign customers decrease both quantity and prices. Many free trade agreements between the Republic of Croatia and other countries have not created new export opportunities for this industry. Moreover, it has experienced increased competition and easier inflow of cheaper foreign goods to the domestic market. The review of current market position of Croatian textile industry, the level of its technological equipment, personal structure and organization, shows how

essential it is to make comprehensive development strategy to this industrial branch.\*

The global position of Croatian textile industry seems as very complicated issue. The aim of this paper is to explain how use of futures market can help Croatian textile industry to reduce operating costs and compete with foreign companies. Raw materials costs have large share in textile companies overall costs, thus managing price risk is extremely important on today's markets because increase of prices shouldn't be transferred to the buyers. Textile manufacture is a major industry. It is based on three types of fibre: into yarn, then fabric, then textiles. Cotton remains the most important natural fibre, and this paper will analyse elimination of cotton price risk as a cost management tool in the textile companies.

Cotton has been in use for over 5000 years. The variety of cotton goods from essentials to luxury materials is as great as the range of the grade, type and quality of the raw cotton itself. Because of its universality, the price of cotton wields enormous influence in the world economy. Through the history, cotton came to represent a kind of universal "currency", of world trade. Cotton grading from coarse to premium is a critical economic issue for the end user. The raw cotton fibre has certain qualitative and quantitative characteristics that can be standardized, making it a commodity well suited for a futures market. The success of a futures market also should involve a broad range of participants with competing price goals and be subject to uncontrollable and unforeseen events, such as drought or flood, which will create price shocks and thereby expose all levels of the industry to price risk. The price history of cotton tells the story of the ever-present price risk. \*\*\*

However, these changes did not affect the cotton futures market primary role in price discovery, risk transfer and price dissemination. The stability and continuity of the cotton futures market is result of contracts ability to reflect spot market conditions and practices.

### 3. HEDGING IN THE TEXTILE INDUSTRY

Primary economic function of futures markets is price risk management, and hedging is the most common trading strategy. Hedging is a group of techniques and instruments designed to hedge against the risk of an increase or decrease in the price of an item traded. Traders who use hedging, i.e. hedgers use futures markets exclusively to avoid price increase or decrease risk, and not primarily to speculate. Hence, in order to understand hedging and use it successfully it is necessary to know futures markets, their nature and trading strategies. Hedging programme of any company is always unique and it depends on internal characteristics of company, its price policy and motives to hedge. Hedging programs always have to adapt to new emerging conditions on the market (Lazibat, Brizar, Baković 2007). Traders on the futures market use hedging by taking opposite positions at the future and spot market, for the same futures. That way loss at one market is compensated with profit on other. According to hedging definition, investor is unable to profit when using hedging. This is true, but investor who uses hedging are producers, not speculators, who own or wish to own goods and profit from its buying and selling, and hedging is tool to assure prices in that buying and selling. The successful cotton hedger can utilize a variable mix of futures and forward contracts. The cotton futures and options markets provide a number of possible hedging and investing strategies and opportunities.\*\*\*

Assume that in early March manager of the textile firm has reached the conclusion that cotton prices have bottomed out and are due to increase over the next several months. In addition, he knows that raw materials supply is expected in late

May. The manager establishes a long position in 10 September futures contract (see table 1.).

Date	SPOT MARKET	FUTURES MARKET
3/5/09	Need 500000 lb of cotton in late May 3/5/09 spot : 44,51 cts/lb	Buying 10 September cotton futures at 47,34 cts/lb
5/16/09	Buying 500000 lb of cotton at 48,21 cts/lb	Selling 10 September cotton futures at 52,46 cts/lb
RESULT	Opportunity cost: 3,70 cts/lb	Profit: 5,12 cts/lb

Tab. 1. Hedging example

Cotton futures contract represents 50000 lb of cotton, and future contract price is quoted in terms of US cents per pound, each point has value of 5, 00 USD. Now assume that in middle May, manager is proven correct as cotton futures prices have increased, and he decides to liquidate his position by selling out the 10 contracts purchased in March. He earned 5,12 cts/lb on his future position, that is

$$10 \times (5246 - 4734) \times \$5 = \$25,600. \quad (1)$$

On the other hand, he needs to buy cotton on the higher spot price, and his result from that purchase is buying for 241,050 instead of 222,550 if he bought cotton earlier. Alternate strategy is purchases call option instead of future contract on the same trading dates as in the futures example.

### 4. CONCLUSION

Facing with increasing competition, Croatian textile industry should take the necessary steps to reduce operating costs and improve its position. One of potential solution is hedging. Another issue is insufficient knowledge of techniques and lack of experience in futures trading among managers in the Croatian textile industry.

Big world companies were using hedging as risk neutralization tool for decades, and companies in the developing countries should follow their example. Although this paper is not enough to show all opportunities of hedging and futures markets, it points out an idea how hedging works as a method of changing textile organization's risk management.

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