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Futures market – important factor of price stabilization

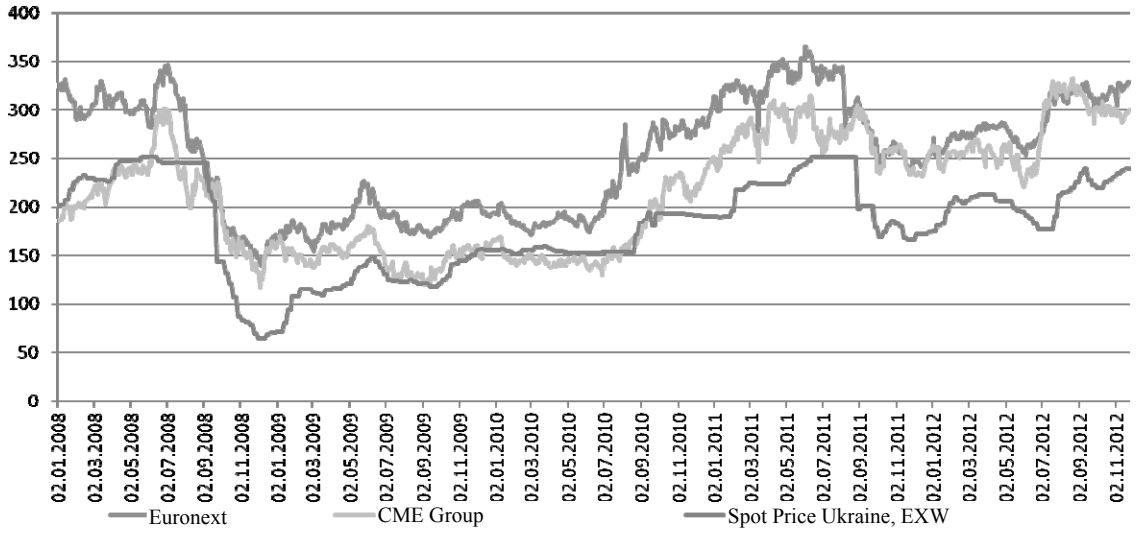
Scientific problem. Statement of the problem. Within globalization and intensification of development in global business environment, leading role of efficient tool in price volatility and risk management in agriculture has been taken by developed stock markets. As a first step to archive congruous, balanced food market in Ukraine, an awareness in irreplaceability of sophisticated futures' markets as a main factor in efficient and equitable pricing has to be accepted.

Analysis of recent researches and publications. Issues caused by the problem of global futures' markets influence on the local retail market and price risk insurance mechanisms have been published in studies by prominent foreign and domestic scholars as: M. Hernandez [8] S. Irwin [5] V. Akvors [7] D. Sanders [6] M.O. Solodky, V.A. Jaworski [1, 2, 3], A.A. Roslyakov, Y. Ruban [4]. Analysis of the literature confirms a lack of studies in field of global organized markets impact on the domestic grain market.

The objective of the article. To study the mechanisms for managing price risk in global agricultural markets in order to study the influence of prices on international markets pricing in the domestic grain market.

Statement of the main results of the study. In today's globalized world stock market derivatives take an important role in the stabilization of commodity and financial markets and allow, via hedging and speculation, to provide price predictability and forecasting of any segment of the market. This condition is achieved by the use of fixed-term exchange contracts – futures and options, the annual volume of trade of the world are determined in tens of billions taking dominant position in the structure of exchange trading. Price risk management using futures markets have valid history within global management practices, especially gained widespread use of commodity derivatives in commodity markets – particularly agricultural products, due to the specific conditions of production and increased social responsibility for a full supply of food [3]. Urgent at this stage of our country is that the domestic economy is rapidly integrating into the world and, accordingly, the agricultural market pricing is largely dependent on the conditions leading markets in the world. Thus the study of the domestic grain market has approved high correlation between spot prices for corn, wheat milling and futures prices for these crops in the leading markets of the world (Fig. 1 , 2 , Table 1 , 2).

The analysis shows that Ukrainian spot market prices of maize demonstrate high level of correlation with the quotations of futures prices for the crop on Euronext, CME Group and the Budapest Stock Exchange. It should be noted that the greatest degree of correlation observed between the Ukrainian and French markets, which is likely due to the geographical proximity and the same quality (not genetically modified corn), as well as the fact that both countries compete with each other on common export markets North Africa and the Iberian peninsula [4].



Source: Own development

Figure 1. Futures prices for corn on the Euronext, CME Group and spot prices in Ukraine, $/t

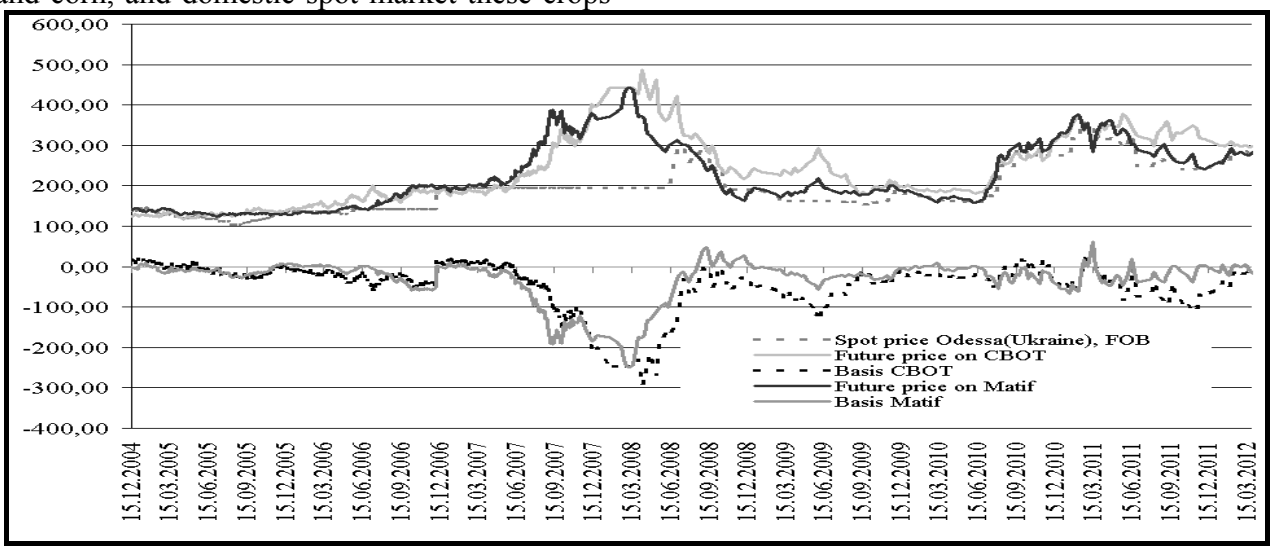
1. Results of correlation analysis on the market of maize

	Euronext»	Chicago Mercantile Exchange	Budapest Stock Exchange	The average spot price In Ukraine,
The average spot price In Ukraine, EXW	90%	79%	89%	100%
Exchange «Euronext»	100%	89%	96%	90%
Chicago Mercantile Exchange	89%	100%	87%	79%
Budapest Stock Exchange	96%	87%	100%	89%
Number of observations	1260	1260	1260	1260

Source: Author estimates.

As the degree of correlation with the price of the crop on the Budapest Stock Exchange and domestic spot market, it is also extremely high.

Comparative study of the U.S. market wheat and corn, and domestic spot market these crops shows that this dependence is rather high for hedges, but, nevertheless, it is below the level of correlation with the European stock markets [7].



Source: Own development

Figure. 2. Futures price of wheat on the exchange «Matif», the Chicago Mercantile Exchange and the spot price FOB in Ukraine, $ / t

At the same time there is a high degree of correlation between the prices of Corn Exchange "Euronext" and the Budapest Stock Exchange and, therefore, the exchange between "Euronext" and the Chicago Mercantile Exchange.

The same trend is confirmed by the wheat market.

But it should be remembered that these correlations regarding domestic spot market withdrawn without basis, that is the most accurate tool for conducting security price risks, as it takes into account such important components as the price of storage, logistics costs, the cost of credit and so on.

2. Results of correlation analysis on Wheat market

	Exchange «Euronext» (Matif)	Chicago Mercantile Exchange	The average spot price In Ukraine, EXW
The average spot price In Ukraine, EXW	78%	79%	100%
Exchange «Euronext» (Matif)	100%	92%	78%
Chicago Mercantile Exchange	92%	100%	79%
Number of observations	1260	1260	1260

Source: Author estimates.

Currently, futures markets of Chicago, London and Paris were spot pricing places of agricultural products for the world. Such markets are called the reference, means markets for quotes are oriented in setting prices in local markets around the world. They expanded geography of its operation and now hedging operations performed on them by operators from almost all over the world.

Despite the urgency of the problem of price risk management in agriculture, the issue of the role of this process in the futures market in our country is undervalued. Today pricing in the agricultural market, especially grain, is largely dependent on world demand in the futures markets and it is under annual grain exports from the country in the amount of 25-30 million tons. A paradoxical situation when world prices are priced in demand in the ports of the Black Sea minus freight rates. By this time in domestic practice not using effective tools to manage price risk, due to shortcomings in the current legislation, foreign exchange regulation, poor logistics and exchange infrastructure and lack of strong speculative capital. That is why international traders who work in the domestic grain market and some regional agricultural holdings prefer foreign exchanges in hedge price risks [1, 2].

Insurance price risks majority of traders in overseas futures markets gives them significant influence on the formation of spot prices in the domestic market and to ensure, at the expense of guaranteed profits.

Having a well-developed internal infrastructure, regional elevators, river and even in major seaports at numerous locations, most manufacturers offer traders spot prices, which are not generally differ.

Attempts by the state to implement some elements of the market mechanism to influence the formation of prices in the grain market, such as trade and financial intervention, double warehouse certificate, mortgage purchase, agricultural receipts, etc. does not bring the desired results. Simultaneously, continuous introduction of administrative methods of influence, such as the prohibition of export, the use of quotas and licenses for agricultural markets, usually only leads to loss of income producers.

In view of the special merits and negative experience implementing market mechanisms maintain equilibrium in the market price of grain through trade and financial interventions. Agent to carry out these operations in the domestic market were identified Agrarian Fund, which annually allocated significant budget commitments and assigned permanently to carry through agricultural exchange market intervention processes within regular set minimum and maximum prices. Only in 2013 the State formed a budget in 7.2 billion USD for the formation of the intervention fund. In addition, selected another 500 million to finance the budget program "Agricultural Fund expenses associated with a set of measures for storage, transportation, processing, and export insurance subject to state price regulation of state intervention fund" and 24.0 million for budget program "Organization and regulation of institutions in the system of agriculture and support of the Agrarian Fund". Overall, in 2013, this fund allocated 7.7 billion USD. This intervention activity of the institution does not affect the pricing in the agricultural

market. Spending significant amounts of budget support, declared the state minimum prices (financial intervention) is not provided set target, because the real market transactions are made at prices well below the minimum. A grain purchases using forward contracts and processing them through the stock market at fixed prices, excluding the current situation prevailing in the spot market, has nothing to do with market intervention mechanisms, but rather like a "soviet government procurement". This mechanism involved in the program producers' forward contracts is not transparent, which opens significant opportunities for corruption schemes. A similar situation exists in the implementation of trade interventions grain stocks held by the fund. In summary, it can be argued that the Agrarian Fund has virtually no active intervention activities on agricultural exchange market to influence price formation process and become a regular state structure on budget expenditures, such as SAC "Bread of Ukraine", the State Food and Grain Corporation of Ukraine and others.

The same part suffered in the domestic market and the double storage information that is effective in countries with market economies. The next step is expected to unpredictable results and agricultural receipts that provided in the country of origin - Brazil, over the years, substantial financial support to producers.

The situation prevailing in the agricultural market, especially crop production in the country is threatening. No civilized and not monopolized spot market in which the important role played in the process of pricing commodity exchanges preclude the market, especially for producers to use long accumulated international market mechanism Society transparent pricing, insurance and risk management, ensuring perfect competition, obtaining comprehensive information for decision improved management decisions.

It's time to realize all that a country that has one of the most powerful potential of agricultural production in the world, must also be an effective global center of pricing policies for agricultural products. Achieving this is possible only if highly developed stock market, where the leading role of the futures market futures and optional contracts.

Make it easy, especially with the current mentality of officials, most are not patriotic businessmen who are trained to work in a non-transparent market and a numerous army of producers who have adapted to this environment.

As the experience of the U.S. and the West, but not consistently and formally introducing market mechanisms of regulation can be achieved by balancing the interests of the food market and insurance risks and contingencies planned a profit for all participants.

The first step to achieve the harmonious development of the food market in our country has become fully realize that a fair price is only for exchange spot and futures markets.

The prominent American expert exchange market Saunders rightly argues that futures markets are an extension of the physical markets. They are created in the evolution of market processes and their purpose is to improve the functioning of physical markets. Therefore, to understand the futures market should be very familiar with the market of the underlying asset, which is the physical market. Through this interaction, the futures markets are the place where a price for goods. Futures prices are a reference value for producers, processors and consumers of goods and services both at national and international levels. Futures markets facilitate marketing and transfer of ownership of goods and services and enhance the fullness of price information on the physical market. Futures markets attracted speculators who are looking for information and trades that promote better management of pricing. Speculation is not free, because the information is also not free, but this activity leads to lower overall marketing costs for each participant [6].

Futures markets are efficient because they are close to the classical concept of perfect competition. The structure of futures markets created in the evolution of a market economy, rather than governmental and regulatory authorities. Currently tasks of regulatory authorities more concerned with preserving the original structure of the futures market. In the futures markets there are a large number of sellers and buyers that prevents any significant impact on the market of one particular trader. Futures contracts are perfectly homogeneous except for the date of delivery and the cost of entry is very low.

The existence of futures markets has created an information flow that exceeds the information that comes from any other markets. This allows you to make more informed management deci-

sions. Futures markets are the place of interpretation and exchange of information that is the most important economic role for the participants and for those who are not directly engaged in the trade market. Futures markets through its informational role make more efficient functioning of physical and spot markets [5].

Modern information systems futures markets have become very sophisticated and technologically advanced. Sophisticated computer trading system, even without human intervention, have become commonplace. Already established and successfully operating e-commerce system that also covers trade on the stock exchanges from around the world. Information is distributed worldwide web instantly and clock.

Business entities are facing price risk when buying resources, their processing and sale. During all these processes, prices can vary significantly; sometimes it can lead to losses. For the successful functioning of the market must be able to manage the risks, and the successful management provides a positive financial impact and who can minimize the risks will be greater opportunity to obtain higher profits.

Conclusions. The analysis can be argued that agricultural prices are formed depending on supply and demand in the market influenced by the unique characteristics of specific products and distribution channels. National markets are becoming more open to the influence of the world market price, for the most part, forming a global and local markets follow these trends. Price Risk Management in the agricultural market highly developed countries is to use exchange tools for fixing or insurance of adverse price situation.

Prices of agricultural market countries are influenced by world prices because grain farming country is export-oriented and integrated into the international trading system.

Currently the country is not functioning system of price risk due to inadequate national legislation, currency regulation, poor logistics and infrastructure stock and the lack of strong speculative capital. That is why international traders who operate in the grain market of the country and large domestic agricultural holdings prefer global stock markets to hedge risks turning Ukrainian grain market in the world appendage and do not contribute to the formation of prices is not competitive environment in the domestic grain market by preventing the development of stock market in country.

Today it is known that futures markets serve several functions, the most important of which are: simplification price risk management, helping businesses in the forward pricing, providing businesses tools to attract and protect additional operating capital to provide adequate information for decision-making.

It's been a deeply realize officials of various ranks, politicians, businessmen, especially domestic managers and scientists that country which occupies a leading place in the world production of agricultural products, especially grain, and in the future this trend will be strengthened, should have a strong market infrastructure (not formal), especially futures stock market, providing transparent, fair pricing, which affect the world situation and helps the different types of insurance risks.

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