Necessary and Sufficient Conditions for a Successful Futures Contract: The Case of Black Sea Wheat

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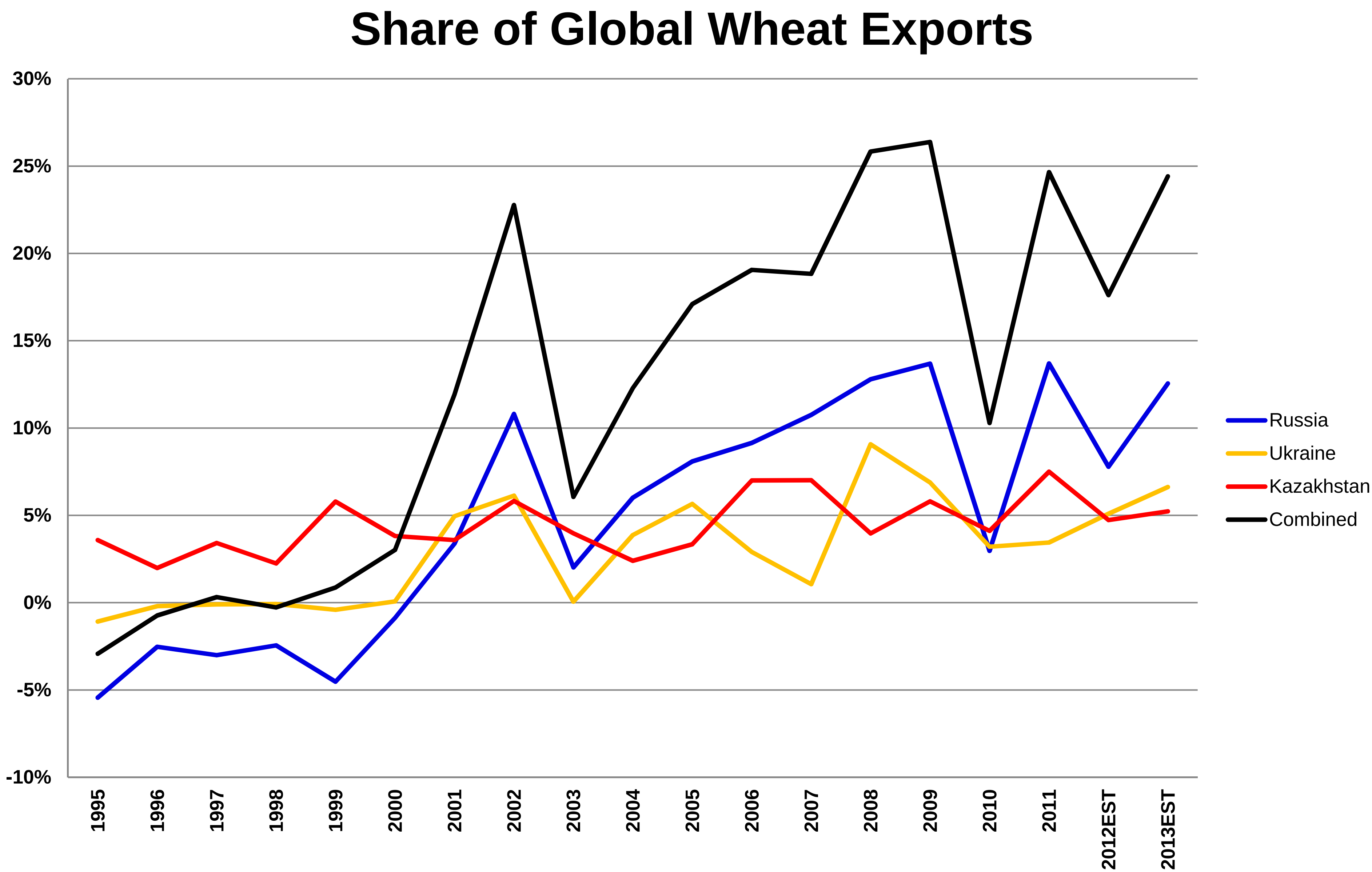
Introduction

Over the past decade, the Black Sea region has become an important player in the global export market for wheat

- Net exports from Russia, Ukraine & Kazakhstan account for one-fourth of total world trade (see chart)
- Romania & Bulgaria also net exporters
- Turkey & Georgia more or less in balance



Source: USDA-FAS

Black Sea Wheat Futures

Black Sea prices may not be highly correlated with wheat prices in other parts of the world

On June 6, 2012, Chicago Board of Trade launched a futures contract for Black Sea Wheat

- Delivery at 10 ports in Russia, Ukraine & Romania
- Contract size = 136 metric tons (5,000 bushels)
- Minimum 75 contracts (≈ 10,200 MT) for delivery
- Dollar denominated

Futures and Hedging

Function of a futures contact

- Price risk management via hedging
- Price discovery

Hedging: Holding opposite market positions in the physical commodity and in futures, so that gains in one market offset losses in the other

Result: Price level is “locked in” and only basis risk remains

Necessary Conditions for a Successful Futures Contract

From the literature, five requirements stand out:

- Large, competitive underlying cash market with no entity large enough to influence the price
- Homogeneous, undifferentiated (fungible) product with established grades and standards
- Price volatility and market transparency
- Lack of suitable substitute futures contracts for cross-hedging
- Free of government interference or excessive regulation

“Free of government interference or excessive regulation”

Since 2007:

- Ukraine has suspended wheat exports 3 times
- Russia has suspended wheat exports 2 times
- Kazakhstan has suspended wheat exports 1 time

Impact: In the event of an export ban, the buyer (receiver) in a futures delivery would not be able to take delivery of the commodity or transport it to another part of the world

"Free of government interference or excessive regulation"

In a futures delivery,

- The seller of the futures contract must deliver the physical commodity to the buyer, and
- The buyer must pay the futures price for the commodity to the seller

A futures market is a "derivative" market, so any problems in the market for the physical commodity also will exist in the futures market

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POLICY BRIEF

MAY 2012 | NO. 2

BUILDING AN ENABLING ENVIRONMENT FOR FUNCTIONING COMMODITY EXCHANGES

USAID-EAT Project | University of Illinois

Agricultural growth and trade in developing countries is often inhibited by the high costs of finding and screening trading partners, determining the quality of goods traded, negotiating prices, enforcing contracts, and coping with price volatility. An active commodity exchange, where multiple buyers and sellers trade

Source: http://eatproject.org/library.aspx

Alternate Approach To Evaluating Futures Market Potential

Principle 1: A functioning spot (physical commodity) market is a prerequisite to an effective commodity exchange.

- Credible, tradable and enforceable contracts
- Functioning system of grades and standards
- Adequate storage and other facilities
- Transparency in market information

Alternate Approach To Evaluating Futures Market Potential

Principle 2: [Public policy should support the development of] the infrastructure and systems necessary to the functioning of the commodity exchange.

- Adequate physical infrastructure
- Efficient and sound clearing system
- Open commodity markets, with prices free to adjust to changes in supply and demand
- Education and capacity building

Alternate Approach To Evaluating Futures Market Potential

Principle 3: Regional and alternative approaches may help overcome constraints to domestic commodity exchanges.

- Use of offshore commodity exchanges
- Use of regional commodity exchanges

Sufficient Conditions for a Successful Futures Contract

<u>Necessary Condition</u>: If we don’t have X, then we won’t have Y (i.e., Y requires X)

<u>Sufficient Condition</u>: If we have X, then we will have Y (i.e., X guarantees Y)

Successful futures contracts

- Many necessary conditions
- Few (no?) sufficient conditions

Summary and Conclusions

Results to date for Black Sea Wheat futures are consistent with what theory and experience would predict

Many requirements for success

Black Sea Wheat provides a useful guide for future efforts to launch contracts in new parts of the world

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