



GRAIN AND SOYBEAN INDUSTRY DYNAMICS AND RAIL SERVICE

Trends in Grain and Soybean Economics

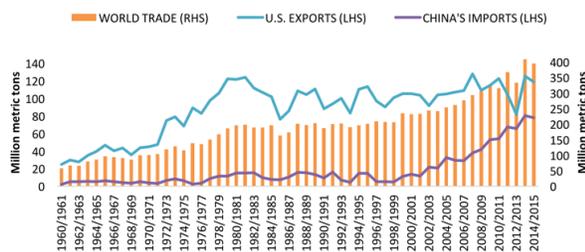
BACKGROUND

The logistics of grain and soybean production and distribution, especially in the North American western regions, are undergoing significant restructuring driven by the desire and need to achieve economies of scale and reach export points to foreign markets where prices have been at historically high levels. This study examines the factors shaping the grain and soybean sector in terms of market competition, demand and supply trends, and related industry dynamics. This includes the extent to which global market developments are leading to the restructuring underway in the North American production regions as producers leverage operational efficiencies to improve their global market competitiveness.

METHODOLOGY

Several statistical datasets were used in this study. These include the United States Department of Agriculture (USDA) database which is composed of (1) the Foreign Agricultural Service (FAS), (2) the Economic Research Service (ERS), (3) the National Agricultural Statistics Service (NASS), and (4) the Agricultural Marketing Service (AMS). Other data sources include the Food and Agricultural Organization of the United Nations (FAO) and the World Bank. The data analysis was informed by an exhaustive literature review on the grain industry and its interrelationship with the transportation sector.

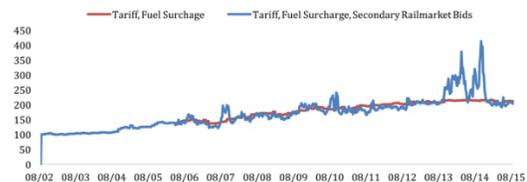
SUMMARY OF RESULTS



Major Grain and Oilseeds Trade Trends

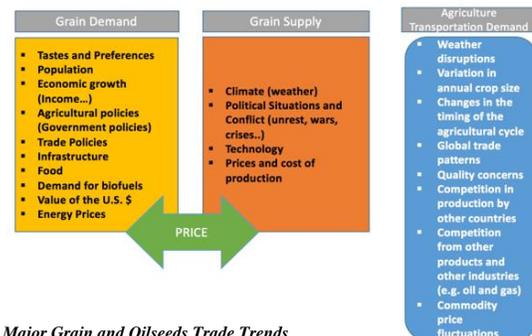
- Over the past several decades, international grain and soybean trade has risen dramatically, with China a major source of import demand, specifically for soybean, rice, wheat, barley, corn and distiller dried grains (DDGs).
- The United States has been a significant global trade player with high shares of grain and soybean exports, but decreasing share of global trade as it faces increasing competition from emerging grain and soybean producers.
- South American producers are more competitive in production operating costs, as they benefit from cheap land and labor.

- U.S. grain and soybean stakeholders in turn compete through enhanced yields possible with better technology, and lower logistics costs due to greater efficiencies.
- U.S. producers are highly reactive to global demand and relative prices, switching land use among crops based primarily on profitability and rotational considerations.
- Transportation suppliers continue to devise ways to provide high service quality and improve reliability while reducing cost.
- The introduction of shuttle trains has given the United States a substantial competitive edge over South American competitors, reflected in much lower transportation costs from farm to export port.
- However, the gap in relative transportation costs has begun to diminish as competing producers seek logistics know-how and efficiency.
- Furthermore, rail service problems still occur due to, among other factors, traffic growth and change in traffic mix. Those factors, as well as the direction of change in speed relative to changes in volumes should be closely monitored.
- These factors create capacity tightening that is reflected in higher secondary rail market bids (as in 2014—see chart).



Rail Rates Including and Excluding Secondary Market Bids

- Continuing innovation in production and logistics processes and services is critical to address market challenges and to remain competitive as a major global player in the international grain and soybean market.



Major Grain and Oilseeds Trade Trends