



CASE STUDY

Derivatives Portfolio Analysis for an Agricultural Commodity Trading Firm

FTI Consulting advised an agricultural commodity trading firm (the “Trader”) in the analysis of its portfolio of structured derivatives trades and hedges.

SITUATION

The Trader is a US grain merchant that offers structured derivative contracts (the “Contracts”) to purchase corn, soybeans, and wheat from local farmers. The Trader hedges the structured contracts using exchange traded and over-the-counter derivatives (the “Hedges”). The Contracts and the Hedges form together the Trader’s derivatives portfolio (the “Portfolio”).

The Trader meets the margin requirements of the Hedge through a financing facility from a bank (the “Bank”) that is not a counterparty to any of the trades in the Portfolio.

Due to price volatility of the underlying commodities and the complexity of the Contracts, FTI Consulting was retained by the Company to value the Portfolio, analyze its risk profile, measure the effectiveness of the Hedges, and provide a summary report to the Trader to be shared with the Bank.

OUR ROLE

Our team worked closely with the Trader and integrated the Portfolio (of more than 10,000 derivatives positions) into FTI Quantum, our proprietary analytics and risk management system.

By leveraging Quantum, we were able to develop quickly custom pricing models for the Portfolio, which included exotic structures with complex binary payouts.

We provided a comprehensive analysis of the Portfolio's risk to the commodity forward curves and volatility surfaces and developed customized stress tests.

Our team of experts evaluated the effectiveness of the Hedges in response to changes in the forward curves, volatility surfaces, and time.

We also assessed the liquidity of the portfolio and analyzed issues created by illiquid positions.

The team provided recommendations to the Trader on how to improve their risk profile going forward. For instance, the portfolio consisted of some long-dated exposures that required proxy hedging due to illiquidity in long-dated contracts.

We provided an independent report for the Trader's bank in the context of their assessment of the increased margin financing requirements of the business.

OUR IMPACT



The team produced a detailed and actionable report leveraging our commodity trading expertise and proprietary Quantum technology.

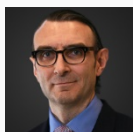


Our analysis was critical in the Trader securing additional financing from the Bank to support the margin requirement of its trading and hedging activity.



Our team's analysis also helped the Trader restructure its portfolio and adjust its risk profile to be aligned with the Trader's risk appetite and strategic objectives.

The views expressed herein are those of the author(s) and not necessarily the views of FTI Consulting, Inc., its management, its subsidiaries, its affiliates, or its other professionals. FTI Consulting, Inc., including its subsidiaries and affiliates, is a consulting firm and is not a certified public accounting firm or a law firm.



FRANCK RISLER

Senior Managing Director & Leader
Securities, Commodities and Derivatives
212.841.9348
franck.risler@fticonsulting.com