The Economics of Energy Commodities Trading and Market Manipulation Allegations

The Editor interviews Greg Leonard, Vice President and head of the energy and commodities practice at Cornerstone Research. Dr. Leonard consults with clients on complex commercial litigation and regulatory proceedings involving energy, commodities, finance, antitrust, and intellectual property.

Editor: What needs do your clients present that require consulting services from Cornerstone Research’s energy and commodities practice?

Leonard: One of our primary focus points is the trading of commodities: natural gas, crude oil, propane, metals, and agricultural commodities, as well as financial derivatives, which often are treated like commodities. We are brought in to assess the conduct of market participants, typically with respect to determining whether they have manipulated the market.

When regulatory investigations or civil cases allege such misconduct, we will additionally figure out whether, and to what extent, it had an impact on the market. In the context of litigation, we provide evaluations as to contracts; the valuation of assets, such as natural gas production or crude oil assets; and portfolios of physical and financial positions. There is often a need for overall market analysis, sometimes involving questions about big changes, for example, the massive transformation of the U.S. natural gas market from 2006 to 2010. In our role as experts, we speak to specific market changes and how they affect a situation in the context of litigation.

We also work in international arbitrations involving energy products, energy assets, or contract breaches across the globe; in valuation and contract disputes; in antitrust and competition matters; and in market design.

Editor: What types of cases or regulatory actions are you seeing most frequently in the energy practice?

Leonard: Over the past ten years, we have seen an explosion of regulatory action, with the hottest topic in the commodities markets being allegations of market manipulation or other types of trading misconduct, including fraud. The allegations relate to potential misconduct around pricing benchmarks. In other instances, regulators and private plaintiffs might allege that a company traded inappropriately or manipulatively. For example, they might allege that the company acquired an excessive position in a physical commodity so as to inappropriately influence market prices around a particular contract expiration or pricing period.

These regulatory actions pertain to natural gas and petroleum products, agricultural commodities, electricity, and financial derivatives products, with a recent emphasis on metals. Actions are brought in the U.S. by the Commodity Futures Trading Commission (CFTC) and in the UK by the Financial Conduct Authority (FCA), among other regulators across the globe.

Editor: What role does a financial economist play in these matters? Are other disciplines involved?

Leonard: Ultimately, we act essentially as detectives trying to figure out what happened and what impact, if any, the conduct had on the market. What trades were placed? How were they placed, and how did that interact with the market? What was the trading strategy? Was that strategy appropriate, meaningless, or manipulative? Was it just legitimate trades? Or was the strategy manipulative? We’re financial economists in the sense of being market economists who think about the market’s structure, prices, and mechanisms.

To your second question, commodities have the distinction of being physical assets, such as oil and natural gas that are sitting in the ground or in pipelines, or being accessed from storage tanks and burned or otherwise consumed by end users. In this context, investigations of alleged fraud require market analysis from professionals in a field of specialty called “industrial organization,” meaning economists who study markets and how prices are formed. In addition, the physical transactions trade alongside financial derivatives. As a result, these financial instruments require thinking about markets beyond the realm of traditional economics. You have to bring in a financial point of view; it means looking at the volatility of prices, the pattern of prices across geographies and time, as well as other facts, such as interest rates.

Editor: Could you discuss the international component of these regulatory investigations?

Leonard: There is a lot of activity in this area. Regarding the internationalization of energy-related investigations, the significant change in the last five years involves the increasing prominence of foreign regulators,
with the FCA, in particular, taking a much more aggressive stance. Companies used to deal primarily with the CFTC or, if there was a criminal element, with the DOJ or a U.S. attorney, but now they are also dealing with corresponding agencies in the UK, Europe, and even Asia.

Editor: What accounts for the heightened interest in these market activities?

Leonard: It could be surfacing from the political world’s increasing focus on energy prices and, following the financial crisis, on the roles of investment banks. Those roles are not just in the financial markets, for example, with respect to LIBOR and foreign exchange investigations, but also in commodities markets in which those banks are heavily involved. So the increasing focus has come out of the financial crisis and has led to more scrutiny of conduct in the commodities markets, both in the U.S. and abroad.

Editor: We understand that Cornerstone Research compiles an annual report based on data that the Federal Energy Regulatory Commission (FERC) tracks about trading activity and pricing methods in the U.S. natural gas market. How do you analyze that data?

Leonard: Coming out of the California energy crisis, there was a push in the U.S. government, and in particular at the FERC, to increase transparency in the over-the-counter energy markets. The FERC created Form 552, whereby companies report their volumes of transactions within various segments of the natural gas market, and the FERC collects and publishes that information. Cornerstone Research’s annual report aggregates and analyzes that data in the context of what’s happening in the market.

We garner some interesting insights from this data collection and analysis. First, unlike many markets in which the top few companies may generate the vast majority of transaction volume, the natural gas market is relatively unconcentrated, with only about half of the activity spread among the top twenty players. Next, we learn that trading in the gas market largely takes place in instruments that are priced based on benchmarks and indices.

Editor: The most recent annual report highlights that there is a shrinking base of transactions that are used to set these price indices for natural gas. What does this growing disparity mean?

Leonard: It’s an interesting dynamic. In the past five or six years, the trading volume for companies that report for the pricing benchmark has decreased relative to the volume of transactions at companies that don’t report. Pricing benchmarks are based on “fixed-price physical trades,” in which two parties agree on a pricing method today and then, tomorrow, sell natural gas at a price derived from that method. Publishers like Platts collect transactional data from companies and other market venues and then construct an index. It’s not exactly an average but more like an indication of the representative market price. Companies then will trade based on these pricing benchmarks, for instance, in saying that the price we agree on today will be whatever Platts publishes tomorrow in the Gas Daily.

So it makes sense that the parties want the index to be robust, which ties back to the point about disparity. With fewer companies reporting, there are concerns about less data overall but also about the ratio of “total fixed-price physical transactions” to “indices that are trading-volume-sensitive.” To be precise, 2008 FERC data showed that 38 percent of volume came from non-reporting companies, while in 2013, that percentage rose to 49.6, which means that half of all trading volume was not reflected in the indices.

Importantly, while this trend is very interesting, I will stress that it would be wrong to conclude from this category of data that individual indices are not adequately robust. For one thing, there’s still an awful lot of volume being counted from just half of companies reporting and, for another, aggregated transaction volume is not the right data for determining the strength of these indices. More accurately, such granular conclusions are drawn from an index-by-index analysis based on the literally dozens of prices—from daily and monthly markets and from various points across the country—that Platts and others publish.

Editor: Despite a significant revival in U.S. natural gas production, Cornerstone Research reports a decline in the amount of natural gas traded in the U.S. (as measured by FERC) and a drop in the number of trades on the IntercontinentalExchange (ICE). Would you explain the significance of these numbers?

Leonard: Cornerstone Research collects statistics directly from the CME Group (Chicago Mercantile Exchange and Chicago Board of Trade) and the ICE as well as separately from FERC Form 552 reports. All sources show a gradual increase in volume each year from 2010 to 2012, but our May 2014 report shows a 2012–2013 decline from those sources.

In real terms, however, that decline dates back to 2010 and 2011 levels—as reported by both the CME Group and the ICE. Other relevant developments result from additional regulatory requirements arising from Dodd-Frank reforms, which have caused a shift from an over-the-counter market to what now is essentially a futures market. Futures contracts are a different animal, so while there may be a preference toward fewer actual trades, the real answer is that the market has fundamentally changed.

Editor: I’m gathering that the volume of trading and the number of trades are not necessarily correlated to the actual production of natural gas in the U.S.

Leonard: Exactly right. Because of the shale boom and new production techniques, natural gas production has risen steadily over the last several years, and prices have stabilized. Obviously, this has some influence on the market; however, as shown by decreased trading volumes, it remains the case that gas trading is not necessarily related directly to gas production. It will be interesting to see whether that trend continues in 2015 or whether this is just a one-year lull.

Editor: What are the emerging legal issues for companies in the energy sector?

Leonard: In addition to transformations from the shale boom, emerging legal issues stem from heightened scrutiny of trading conduct and a more complex regulatory environment post-Dodd-Frank. Further, the traditional areas of contract disputes and disputes about the evaluation of assets will continue for companies over the next few years.

Editor: How does Cornerstone Research help clients navigate this new world of market activity and the legal issues that derive from it?

Leonard: Cornerstone Research offers broad in-house expertise in terms of market knowledge and highly qualified economists within finance disciplines, which are necessary assets for clients facing trading disputes. We have decades of experience in analyzing trading cases and have been involved in virtually every major high-profile market manipulation case going back to well before the California energy crisis. Given this tremendous depth of experience across our entire team, we can come into these legal and investigatory matters, analyze the markets and market conduct, and effectively figure out what went on. The breadth of our expertise from finance to antitrust and competition to energy and commodities is the key in these large matters.