The commodity markets have witnessed major fundamental shifts in recent times. For example, advances in mechanical and chemical engineering in the energy markets have accelerated the ability to extract and process energy sources previously thought inaccessible at an unprecedented scale. Massive investments in infrastructure are transforming the future of extracting, processing and transporting raw materials—everything from agricultural products, base metals, natural gas, coal, petrochemicals and refined products—in order to meet the growing needs of the rising world population. New trade flows and trade patterns are emerging to supply new markets—particularly in Asia. Rapid industrialization, growing populations and profound socio-economic changes affecting hundreds of millions of people worldwide are creating new game-changing consumption patterns. In this article, Leor Jivotovsky and Jeffrey Wang discuss how these new paradigms are affecting the Price Reporting Agencies (PRAs) and how they are adapting their product and service offerings in the face of these new realities.

WHAT ARE PRICE REPORTING AGENCIES?

PRAs are publishers and information providers who report prices transacted in physical and some derivative markets and give an informed assessment of price levels at distinct points in time. Their core activity comprises the publication of market reports containing the price assessments, market commentary and news, and business intelligence reports that analyze market and industry trends.

As physical commodity markets continue to evolve, PRAs will continue to play a central role by providing the needed pricing, analytics and transparency to these markets and fulfill their roles as information providers. For example, Platts and Argus, two of the major PRAs, each publish over 8000 price assessments per day across energy, metals, agriculture and freight markets and are staffed by hundreds of reporters overseeing specific commodities. In the past, market participants possessed information advantages—a phenomenon in economics known as information asymmetry. One can argue that because of PRAs, the competitive advantage that firms may have had in the past from superior price information has been largely marginalized.
PRAs fill an important role by collecting, collating, editing and disseminating information. In the absence of PRAs, subscribers would rely on alternative sources of market information and would need to augment their own internal collection and analysis activities—likely at a much higher cost.

PRAs provide much needed transparency in what is otherwise a largely unregulated and opaque $5.7 trillion a year physical market. Unlike markets for stocks and futures, where trading is conducted on regulated exchanges with prices visible to all, the buying and selling of physical commodities is largely private. Although some physical exchanges have developed over the years providing trading venues for various commodity asset classes, such as the European Energy Exchange or the InterContinental Exchange, the bulk of physical trading is still conducted bilaterally and privately between counterparties.

### Table: The Major PRAs and What They Cover

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*Figure 1. The Major PRAs and What They Cover*

**HOW ARE PRICE ASSESSMENTS FROM PRAs USED?**

Price assessments are used as references in physical supply contracts and ultimately determine the settlement value for the commodity being bought or sold and the cash flows that ensue. In other words, they represent the index in physical trade. Financial derivative contracts traded on exchanges or in the over-the-counter (OTC) market also reference price assessments. They are also used for mark-to-market purposes, as an indication of value for tax assessments and for analysis and planning purposes. They are used by commodity markets participants such as producers, end users, marketing and trading companies, banks, governments and regulators.
Prices may be assessed by a PRA but may not be considered a benchmark price. An assessment becomes a benchmark when it is well entrenched in physical commodity contracts as a price setting index. Only when price assessments are used as reference prices that ultimately determine the settlement value of contracts do they gain benchmark status. Becoming the benchmark is the prized achievement for a PRA as it establishes dominance and notoriety in that particular market and secures a steady stream of revenues for the PRA.

Dependency on voluntarily disclosed market data means that socialization of assessment methodologies is important in the creation of a more thorough and accurate assessment. Market players need to be able to understand that participation in the process benefits all parties involved through efficient price discovery—especially true in illiquid markets where only a few data points can be gathered. Firms are also more likely to utilize assessments when they understand what data is being used and how prices are ultimately published.

METHODOLOGY

Assessments adhere to specific sets of principles, guidelines and formulas. Assessment methodologies will vary between PRAs and even between different commodity assessments covered by the same PRA.

Reporters monitor their markets, collect data and publish assessments by applying their methodologies and market analysis to the data collected. Market data (i.e., trade details, bids, offers) is gathered from participants across the industry via exchanges, telephone, instant messaging, email and other combination of data platforms. Transaction details, bids, offers, volumes and counterparties are all voluntarily disclosed by market participants with the belief that participation leads to optimal price discovery and enhanced market liquidity.

Various safeguards and quality control processes ensure that assessments are unbiased, not subjected to manipulation and reflect the true market price. Measures might include: the removal of lowest/highest bids and offers, removal of other outliers, normalization of data, required verification of supplied information, periodic reviews of participants, counterparty acceptances and other defensive tools. Ultimately though, acceptance is left to the best judgment of the editor/reporter in charge of the assessment.

A SPOTLIGHT ON THE METHODOLOGIES

Calculation methodologies—particularly for oil markets—have caused international scrutiny of PRAs. In 2011, the G20 Leaders Summit requested that IOSCO assess the role of PRA assessment calculation methodologies, as these assessments have impacted the physical oil markets, broader financial markets and the economy as a whole. The IOSCO subsequently published a report in October 2012 that identified significant problems with the methodologies employed by some major PRAs and provided recommendations on addressing these concerns.

One problem highlights how different methodologies cause the price reported by one PRA to differ from that reported by another PRA for the same product location and delivery period. On particularly volatile days, the differences can be substantial. PRAs willingly describe their methodologies and insist that they adhere to them but judgment inevitably enters into the application of these methodologies. Although the industry views the work of PRAs to be high quality, some feel that PRAs exercise too much power and that there is no one to whom they can appeal when they believe the PRA’s judgment to be wrong.

Recent allegations of benchmark manipulation have attracted the scrutiny of regulators. Since contracts rely heavily on these benchmarks to determine pricing, market players have the incentive to try and
move assessments to their favor. These benchmarks are also used as a guide to price consumer end products, so end users may be bearing more costs than fair market price. In the last few years, PRAs and industry players have been probed and raided on accusations of collusion, a charge that they are vigorously contesting. In the face of this criticism, some alternatives to PRAs have emerged. One such solution is the Energy Data Hub (EDH)—a service that collects market information from participants based on actual transactions, performs all of the validation and standardization processes, and then publishes market metrics such as prices, volumes and volatilities. EDH is a market utility that provides the industry with much needed price discovery and alternative benchmarks particularly in more opaque markets. One of the major differences with PRAs is that EDH only uses actual transaction data rather than bids and offers that are contained in PRA assessments. One can argue that such an approach legitimately represents market prices.

DEMAND FOR NEW ASSESSMENTS

With fundamental supply shifts and demand rebalancing, PRAs are constantly looking at their product offerings to see what assessments need to be created, modified or eliminated in order to respond to client demand and preferences.

To support more editorial coverage in a particular market, PRAs can look at a market from four key dimensions:

› Market Fundamentals
› Market Participants
› Market Structure
› Market Positioning

**Figure 2.** The 4Ms Guiding the Strategy for Price Assessments

Legend:
Research Components
Evaluation Criteria
RECENT EXAMPLES

A few examples of recent market developments can demonstrate how PRAs need to be thinking about their assessment coverage.

According to the Energy Information Administration, US crude oil production will reach 8.5 million barrels a day (mbpd) of production by the end of 2014—up from just 5 million barrels per day in 2008. A lot of the new supply is coming from production basins that are not adequately served by a pipeline network. In order to bring this abundant supply from oil fields to refineries throughout the United States, rail with 140,000 miles of track has been the mode of transportation used.

Figure 3 illustrates the phenomenal growth of crude by rail.

As an example and noted in Figure 4, one area in which production has exploded is the Williston Basin, where rail represents the major mode of transportation. To meet the growing needs of producers, the number of rail terminals (at a price of a few hundred million dollars per terminal) being built in just 3 years has gone up by a factor of 5—from 3 terminals to 16 and loading capacity has gone up 10 times in the same time period, as shown in Figure 5.
As a result, PRAs have introduced new freight intelligence and rail price information and assessments at major crude rail junctions and rail terminals for crude and even other markets such as chemicals, forest products and grains. Applying the 4Ms to this example, the PRA must recognize how changing market fundamentals are pointing to new trade flows and transportation dynamics. A review of the market structure demonstrates to the PRA that new types of contracts have developed with new volumes. In addition, the addressable market and community includes new local producers and railway companies as potential new clients.

With the analysis of the 4Ms, the PRA takes the step to launch the assessment. It must then ensure its quality and completeness to achieve industry adoption. Another area that has caught the attention of PRAs is the global liquefied natural gas (LNG) market.

Since the 1960s when LNG was first produced in Algeria and delivered to the United Kingdom, demand has grown 500 times and has attracted 30 countries. Today, world LNG trade involves 158 country-to-country flows with over 370 sea transportation routes with 70% of LNG demand coming from Asia. Exports on average have been rising over the years, as shown in Figure 6. Demand is strong because countries are seeking supply diversity or energy security. Japan, for example, has practically replaced nuclear energy with LNG following the nuclear disaster in 2011. Other markets, such as Korea, Taiwan and China, are seeing natural gas displacing coal as a cleaner, increasingly abundant and relatively low carbon form of energy that can meet their growing needs. To support this demand, liquefaction capacity needed to liquefy gas into LNG has exploded with many projects currently under construction or being proposed, as shown in Figure 7. Viewing the LNG market across the 4Ms provides the PRA with a perspective on how its product strategy for LNG should evolve.
Figure 6. Global LNG Exports

Source: Bloomberg

Figure 7. LNG Throughput Capacity (annual)

Source: Bloomberg
CONCLUSION

PRAs will continue to play a central role in commodity markets. They will continue to develop new assessments that aim to accurately reflect the market value for these products. By adapting assessments to reflect new paradigms and emerging trends, they strive to provide the industry with the needed market information that ultimately helps make more knowledgeable business decisions. PRAs will continue to play a central role in commodity markets.

Resources


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