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COMMODITIES

SPECIAL REPORT



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The Wind of Change... Is Also Data

The commodities markets are in a state of flux. But unlike the changes that have impacted many other asset classes over the past couple of years, commodities are booming, producing a surge in demand for market data on everything from oil and coal to base and precious metals, and crops and livestock, and attracting interest from not just the major commodities trading firms and brokerages, but other speculative traders, hedgers managing risk against related instruments, and even mainstream investors via commodity funds and exchange-traded funds.

But in addition to the usual types of market data required for trading other asset classes—quotes, trades, terms and conditions, maturities, historical information, research, fundamental data, and charting and analytics—commodities also have a range of additional information that must be collected, ranging from crop growth, Department of Agriculture reports, supply and demand data, metrics on the output of individual mines, and weather. And while price data is broadly available from vendors and brokers, more specialized data is frequently the preserve of niche suppliers.

Not only must this data be consolidated together to be useful; it must also be consolidated with other, related information to meet the demands of cross-asset trading strategies as firms arbitrage commodities against each other, or even against other asset classes—trading physical coal or oil against stock in mining or petrochemical companies, for example.

And as these data demands grow, firms will be forced to deal with the same issues that have already been addressed in other asset classes, such as the need for robust data infrastructures that consolidate fragmented sources of increasing volumes of data, and the efficiency arguments of utilizing real-time datafeeds in the back-office as well as on trading desks, to reduce the risk of error from manual processing.

Meanwhile, the Commodity Futures Trading Commission is deciding on setting limits around the level of positions traders can hold in energy and metals futures. Not only does this leave traders uncertain of whether their holdings are compliant or not with the upcoming rules, but also places a burden on the CFTC to collect its own data for the purposes of real-time monitoring of industry positions.

If commodities weren't complicated enough, they're about to reach the next level, and traders and data providers will all need to respond. ■

Max Bowie

Editor, *Inside Market Data*



Inside Market Data

Max Bowie, **Editor**
Tel: +1 212 457 7768
max.bowie@incisivemedia.com

Jean-Paul Carbonnier, **Deputy Editor**
Tel: +44 (0)20 7968 4588
jp.carbonnier@incisivemedia.com

Vicki Chan, **US Reporter**
Tel: +1 212 457 7758
vicki.chan@incisivemedia.com

Lee Hartt, **Publishing Director**
Tel: +44 (0)20 7484 9907
lee.hartt@incisivemedia.com

Jo Garvey, **Commercial Director**
Tel: +1 212 457 7745
jo.garvey@incisivemedia.com

Elina Patler, **Head of Editorial Operations**
Brett Gamston, **Subeditor (London)**
Matthew Crabbe, **Managing Director**

Pedro Gastal, **Senior Marketing Manager**
Tel: +44 (0)20 7004 7438
pedro.gastal@incisivemedia.com

Incisive Media
120 Broadway, 5th Floor
New York, NY 10271
Tel: +1 212 457 9400
Fax: +1 646 417 7705

Incisive Media
Haymarket House
28-29 Haymarket
London SW1Y 4RX
Tel: +44 (0)870 240 8859
Fax: +44 (0)20 7484 9932
E-mail: customerservices@incisivemedia.com

Incisive Media
20th Floor, Admiralty Centre, Tower 2
18 Harcourt Road, Admiralty
Hong Kong
Tel: +852 3411 4888
Fax: +852 3411 4811



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NEWS ROUNDUP

DCE, CCIA Ally for Energy Price Transparency

The Dalian Commodity Exchange, the world's largest exchange for oils, oilseeds and plastics products, is to begin listing and trading coke futures, and has enlisted the China Coking Industry Association as a partner to promote coke futures research and help develop new products as the exchange expands into energy-related products.

Launching coke futures will enable DCE to expand into the energy markets, beyond its traditional background in agricultural, oils and plastics prod-

ucts, and will help increase transparency in a large but opaque asset class that officials say is in "urgent" need of better mechanisms for price discovery, risk management and hedging.

Coke is used in iron and steel, chemicals and machinery manufacturing, among other industries, and—despite China having almost 1,000 coke-producing companies, generating more than 300 million tons per year—has a long supply chain with volatile prices and high levels of risk. ■



DCE president Liu Xingqiang and CCIA president Huang Jingan signing the agreement that will aid price transparency in coke markets

SunGard Expands Energy Data

SunGard's Fame Energy division has expanded its commodities data coverage with the addition of market data on the spot UK Gas market from the European APX-Endex energy exchange, in response to client demand for European power and gas price data. Fame Energy also carries APX-Endex Power UK spot, Gas NL spot, Gas XEE spot, TFF Gas futures, Power NL futures, Power BE futures, and Belpex power, and already offers various European power and gas spot and futures prices, and data from the European Energy Exchange, Nord Pool, Powernext and the OMEL electricity market. ■

Frego Digs In at DataMine

Matt Frego recently joined CME Group as sales manager for the exchange's CME DataMine historical data service, responsible for one-off sales and global subscriptions worldwide. Frego was previously territory sales manager at real-time and historical energy market data provider GlobalView Software, prior to which he was a senior account manager at the University of Chicago Booth School of Business's Center for Research in Security Prices (CRSP), which sells historical data. At CME, he reports to Tim St. George, director of information products management. ■

IIR Bows Research Portal for Aussie Mining Stocks

Sydney, Australia-based Independent Investment Research has launched a free investment research website for financial advisers, which provides equity research and information on listed and unlisted managed investment funds, predominantly covering companies in the resources and mining industries.

IIR was previously a division of Aegis Equity Research, which was sold to Morningstar earlier this year. But executive director Mamun Rashid says that although Morningstar acquired Aegis' core equities research platform, it did not acquire the firm's alternative investment research covering property, exchange-traded funds, structured products and

equity research on stocks outside the ASX 200.

The firm also operates subscription-based sites for property and ETF research—pir.com.au.au and etfresearch-centre.com, respectively—which Rashid says he expects to be a growing area where financial planners will be expected to advise clients as an alternative to managed funds.

As of October the firm had rated around a dozen structured products and around 32 ETFs, and will initially provide equity research on around 50 of the listed junior mining companies outside the ASX 200, though Rashid says he hopes to be providing research on 250

companies—some of which will pay for coverage—by the time of the Prospectors and Developers Association of Canada convention in March.

The coverage of mining stocks is already generating interest in his research among investors in mainland China, who display an appetite for the risk profiles of smaller stocks, Rashid says.

Looking further into the future, Rashid says he hopes to expand the firm's focus from mining stocks into the biotech sector—and potentially to the energy and banking sectors—over the next five years, which he says could involve opening offices in Singapore and Hong Kong if the opportunity arises. ■



Commodities Vendors on Hiring Spree to Meet Data Demand

Several providers of commodities data and trading and risk platforms have beefed up their client-facing staff in response to expansions and increasing demand.

Over-the-counter natural gas and power trading platform and data provider TruMarx Data Partners recently hired Rob Garfield—former head of energy at Reuters and vice president of market data at the New York Mercantile Exchange—as regional account manager for the Northeast US. Garfield was most recently director of market data at SunGard Kiodex. TruMarx also recently hired Margaret Nagle, a veteran of marketing at Optimark, Archipelago and NYSE, as vice president of marketing.

Trumarx's board includes James Newsome, former CFTC chairman and former president of NYMEX, and Jerry Putnam, former NYSE president and co-founder of Archipelago.

Meanwhile, Jennifer Collins, former marketing director of IM trading software vendor Pivot, has joined energy data provider Genscape in a similar role, to increase the vendor's marketing and communications presence. She reports to senior vice president of products Bill Townsend, who is one of a number of execs with a strong background in the data and energy markets, including Suresh Kavan, chief executive of DMG Information (part of UK media group Daily Mail and General Trust)—

formerly president of Thomson Reuters' Investment & Advisory group and former CEO of I/B/E/S—who heads the company's board.

And recently, Web-based commodities trading and risk management platform vendor Aspect Enterprise named Rouven Schreck director of quality and customer service, a newly created role designed to ensure consistent service as the vendor grows its product range and expands into additional asset classes, reporting directly to CEO Steve Hughes. Schreck most recently held a similar role at IT operations management software provider Rivermuse, and at wireless technology providers Visto and Good Technology. ■

Wiener Börse Adds Energy Futures Data to ADH Feed

Austrian exchange Wiener Börse, part of the CEE Stock Exchange Group, is adding data from more markets to its Alliance Data Highway (ADH) feed, including derivatives data from the CEGH Gas Exchange and electricity futures data from the Prague Energy Exchange.

Wiener Börse began distributing spot market data from the CEGH Gas Exchange—a joint venture between the exchange and energy companies Gazprom, OMV Gas & Power, and Centrex—at the end of last year (*IMD*, Dec. 7, 2009), and will add futures data from the market before the end of this year.

Electricity futures data from the Prague Energy Exchange—a subsidiary of the Prague Stock Exchange, which is a fellow member of the CEE Stock Exchange Group—will also be available via ADH imminently, following the addition of Prague equities data to the feed last year (*IMD*, Sept. 21, 2009).

Wiener Börse now provides data from all Central and Eastern European equities, derivatives and energy markets via a common infrastructure and data agreement. Wiener Börse is also developing new indexes to complement its market coverage, starting with a new short version of its Russian Depository Index. ■

LIM Eyes Cloud 'Marketplace' for Apps, Data

LIM (Logical Information Machines), the energy and commodities data subsidiary of Chicago-based vendor Morningstar, is moving its data processing and delivery to a cloud-based architecture that will make it easier for clients to access data and for third-party vendors to distribute data using LIM as a “shop window” to their services.

“LIM's focus [prior to its acquisition by Morningstar] was on pumping in data... from lots of different vendors,

processing it in Austin, then pumping it to LIM servers on client sites that would connect to downstream client applications,” says LIM president Kishore Gangwani. “But LIM's applications used their own query language, as did its data warehouse, and it took a lot of effort for clients to extract data, so we are trying to open it up to SQL and Web Services so firms are not subject to that proprietary query language.”

As a result, LIM is mak-

ing its data warehouse more open-source and moving it to a cloud computing environment that utilizes standard data formats so third-party vendors can publish reports to that cloud in any format, after which it will turn its attention to allowing clients to make Web Services calls to access information hosted in the cloud via standard APIs, freeing them from proprietary infrastructures and gateway hardware and allowing them to receive data in their chosen format.

“The goal is to provide as much data as we can to as many people... via multiple levels of delivery, in any shape and via any system,” he says.

He says the vendor has already been working on this for several months, and hopes to have a beta version available by year-end. After that, he says he envisages also being able to redistribute applications—such as for analysis or risk management—via a cloud-hosted “marketplace” of third-party apps and data. ■

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Triggering a Commodities Explosion

Demand for commodities market data has never been higher, as the financial markets turn their attention to a less commoditized asset class. Mark Haraburda, managing director of the Commodity Research Bureau, examines the convergence of factors behind the current commodities boom

From 1999 to 2009, volume in exchange-listed commodity futures markets increased by 387 percent in the US, according to the Futures Industry Association. In fact, annual growth was more than 20 percent in all but three of these years, and internationally, futures volume growth over the period was an astounding 590 percent.

When the Commodity Research Bureau started collecting and distributing commodity data in 1934, we tracked just a handful of US agricultural futures contracts. Today we track more than 7,000 futures contracts representing over 80 derivatives exchanges around the world, and markets ranging from energy, grains and metals to interest rates, currencies and equity indexes. This does not include cash markets or options contracts, which shoot the numbers even higher. But what is most impressive is that within the past 10 years, the industry has realized more growth in the number of listed futures markets than the previous 65 years combined.

Why have the commodity markets boomed over the past decade? Reasons include the evolution of electronic trading and international derivative markets, the embrace of commodities as an asset class, and the volatility of commodity markets. In addition, we have also seen major changes in corporate structure through demutualization and public offerings by many of the major derivatives exchanges.

The 21st Century marked the emergence of electronic trading in futures markets. The previous century relied on "open-outcry" trading in pits. Unless you were on the floor of the exchange, you had to phone a broker to place an order then wait to hear if your trade was filled, as your order transcended a sea of hand signals and shouting. In hindsight, this was slow and inefficient, as we now live in the days of microsecond order routing. Electronic

trading brought direct, high-speed access to futures markets to every corner of the world. It enabled you to submit bigger, faster orders with the click of a mouse or at the speed of an automated algorithm. Add connectivity to the internet, and volume from electronic trading was set to flourish.

Looking at the international futures markets over the past 10 years, it's hard to decide where to begin. China, India, Korea, Brazil, Mexico, Russia, Dubai, Thailand—take your pick. Some regions have seen much more growth than others, like China, Korea, India and Brazil, but the others have benefited from the development of new financial instruments to manage price-related risks. The international growth is due to both the economic and social expansions of these countries. The massive infrastructure needs of China and India mean that their need for raw commodity materials is astounding—as is the importance of managing the related price volatility. In addition, as more than a billion people from these regions escape poverty, the dietary demands for proteins like beef and pork have surged, requiring higher grain crops to raise cattle and hogs, as well as more petroleum to fuel related machinery and transportation.

Many investment managers acknowledge the benefit of adding commodity positions to a portfolio. Generally, studies highlight that these portfolios have less risk and higher returns, given the negative correlation between some commodity markets and assets like stocks, bonds and real estate. Second, with the lackluster performance of the stock market over the past decade, more money has flowed into managed futures investments offered by Commodity Trading Advisors and Commodity Pool Operators. Third, commodity-based exchange-traded funds have made it easy for everyday investors to invest in crude



Mark Haraburda
Commodity Research Bureau

oil, gold and even corn. Many of these commodity ETFs then must maintain futures positions to provide the exposure.

From 2000 to 2009, spot WTI crude oil fluctuated from a low of \$17.48 to a high of \$145.66 per barrel, a range of \$128.18. The range in the prior three decades averaged just \$31.39. Over the same period, spot gold experienced a range of \$960.98 per ounce compared to an average of \$405.95 over the prior three decades, while cash corn ranged from \$7.32 per bushel to \$1.62, a difference of \$5.70, compared to an average range of \$3.07. Finally, the CRB Spot Index realized a 286 point range versus an average of 125 points during the prior three decades. To say the past 10 years have been volatile is an understatement—it has been the most volatile period on record for most commodity markets, and the increased volatility has translated into a greater need for hedging and has provided more opportunities for speculation.

This growth was facilitated by the decision of many of the world's largest derivatives exchanges to relinquish non-profit, member-driven structures during this period and became competitive, publicly-traded entities. Suddenly accountable to shareholders, these exchanges became more growth-driven, while more cash was available to invest in new ventures, consolidate, invent new products, and expand futures-related marketing and education.

All these ingredients mixed together, formed an explosive cocktail, and at the turn of the new century, the circumstances fell into place for a commodities boom. ■

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Contact

Philip Winstone
Global Head of Sales, GFI Market Data
+44 20 7877 8112
philip.winstone@GFIgroup.co.uk

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All Change for Commodities

Having the right data to navigate your way through a rapidly changing landscape is essential. Philip Winstone, global head of sales at GFI Market Data, says that would-be players in the evolving commodity and energy markets should look for partners with data, analytics and that critical "human factor."

The challenges for providers of market data to the commodities and energy markets have increased recently as markets have become more interlinked and attracted greater numbers of participants than ever before—all with varying levels of sophistication.

For example, in the power market, previously fragmented venues—made so because of the different regulatory timetables for deregulation across Europe, different and unconnected infrastructures, and different levels of competition—have come more in-synch with each other, enabling cross-market trading. These markets have become more interlinked, so it should soon be possible to speak of a potential pan-European power market, for example.

As this synchronization has taken place in the major markets, a separate push is underway to achieve the same levels of unity across markets in Eastern Europe. This expansion is opening up new markets to derivatives investors and increasing the complexity of—and demand for access to—liquidity pools and over-the-counter data, both for pre-trade price discovery and for ongoing risk management of open positions.

The power, gas and emissions markets, for example, are acting much more like traditional financial securities markets, where the levels of trading liquidity are multiples of underlying physical consumption—much in the same way as an emerging market for traditional financial derivatives—and this underlying-versus-derivatives liquidity ratio is anticipated to continue to increase. This trend is also opening up both physical and derivative markets to less traditional players like banks and hedge funds, which has also placed more emphasis on access to mul-

tiplied clearing venues, while market data providers are therefore being challenged by their clients to provide both pre- and post-trade transparency across a diverse range of derivative instruments.

In addition to the changing regulatory landscape, nature of participants, and the increasing number of instruments being traded, clients are becoming more sophisticated in their use of the natural correlation between (what have historically been) fairly vertical markets in commodities and energy, and are also becoming more vocal about their need for access to cross-market services. The increase in the number of tradable commodity indexes as well as "spread" instruments (such as spark spreads), is a reflection of the increasing interlinking of the various asset classes being traded in this space.

Market participants need to be able to work with firms that are not only able to offer access to multiple liquidity pools, but can also provide pre-trade price discovery tools (including analytics running on streaming and historical data, as well as a human expert-knowledge pool), a hybrid execution capability that includes electronic and voice trading competencies, and to a choice of clearing venues, to take advantage of the increasing interdependency of these markets and to take positions across and between different asset classes.

And it's not only being driven by cross-asset trading, but also by a globalization of trading interest. Historically fragmented markets have meant an interest in pricing data and trading strategies specific to those markets in a somewhat regionally blinkered fashion. At GFI, we are seeing more interest in pricing data for non-domestic markets as clients look to expand their portfolios beyond their



Philip Winstone
GFI Market Data

own borders. This has meant that we have needed to expand the trading and data capabilities in our products to be more global in nature, to give our clients a more rounded view of these markets overall.

Regulatory moves across the financial markets towards greater transparency around derivatives has created the demand for multi-party trading platforms—Swap Execution Facilities (SEFs) in the US, or their equivalent in Europe—and firms like GFI and its Trayport subsidiary that already provide electronic execution platforms with straight-through processing capabilities to a range of clearing venues, are well positioned to take advantage of this movement and capture more flow.

More flow means access to a greater breadth and depth of market data that the information arms of these venues can make available to market participants. The more sophisticated a market, the greater the potential for new tradable products like indexes to provide access to still more pools of trading liquidity. Clearly here, the more complex the composition of these new instruments, the greater the potential for those firms who interlink their trading platform technology with intermediary services and analytics expertise, to provide valuable data and tools to their clients.

Companies are jockeying for position to take advantage of this changing landscape. But those who already operate in this space and already provide that breadth of service to these markets will maintain their edge. ■



Commodities Data Gets Pumped

The commodities markets span assets ranging from crops and livestock to base and precious metals, to coal, oil and electricity—each with its own individual peculiarities and data requirements. With interest increasing among mainstream financial services, this panel of experts describes the key differences and similarities between commodities and other financial markets, and how firms can get the most out of commodities data.

IMD: How do the data needs of different commodities markets compare to those of securities or financial derivatives markets?

Sean Carnahan, global director, commodities and energy, SuperDerivatives: The basic difference between commodity and financial data is in the actual underlying instrument. In commodity markets, the underlying is a physical resource such as wheat, cotton, corn, soybeans, crude oil, natural gas, gold, silver, base metals, etc. In a financial instrument, the underlying is a financial asset such as treasuries, bonds, equities, equity indexes, foreign exchange, or eurodollar deposits. The difference in commodity data needs lies in the uniqueness of the actual underlying and the associated drivers that affect the pricing. In addition, there are extensive sources of commodity market data—200 different data sources for energy commodities alone. Data vendors exist for oil, power, gas, weather, freight, and the various electricity system operators (ISOs). Vendors can also be major commodity brokers and government departments.

Bob McDowall, research director, TowerGroup: The data from the commodities markets is more dynamic and unstructured, so participants are not just dealing with market prices,

but also information on frosts, weather changes, mining strikes, etc., which has a more immediate effect on prices in the commodity forwards markets than on securities. For example, a strike by copper miners impacts copper prices, but also ultimately impacts the stock prices of mining companies.

Philip Winstone, global head of sales, GFI Market Data: Clearly asset class requirements will vary, but in general I don't believe the needs of commodities markets for deep and varied data sources differs to any great degree from those of what some might consider to be a more traditional and/or sophisticated financial derivatives markets. Timeliness requirements might vary, but the requirement for rich, good quality, well-sourced data doesn't—or, more pertinently, shouldn't. Clients who were once purely participants in the physical markets have become more sophisticated in the way they approach the derivatives markets—i.e. they understand that derivatives can and do play an important part in their ability to (for example) hedge their physical positions—and their data requirements have become just as sophisticated, and sourcing good quality OTC data has become more of a priority.



“Demand for commodity data has never been greater. With the rapid growth of managed futures and commodity-based exchange-traded funds, the need for underlying commodity data by fund managers and individual investors is exploding.”

Mark Haraburda, managing director, Commodity Research Bureau

Shamus Martin, trading manager, Sprague Energy: The biggest difference is that we need to know information about the underlying commodities—i.e. the physical market. We need to know about stock levels, transportation, refinery problems, quality issues, etc. to determine what is driving the prices.

Renée Krall, global product manager, Platts: The key difference between, say, physical oil markets and financial securities markets is the constantly changing mix of physical oil data. For example, in the last two years, data began to emerge on the amount of crude oil being stored in tanker ships that were essentially parked due to the economic recession. This “floating storage” contained 100 million barrels of oil—enough to flood the market and send prices tumbling—and therefore was critical to anyone trading or needing crude. This year, that oil in floating storage is almost gone, and so is the data.

Additionally, there is a much broader range of sources for oil market data, as—unlike many exchange-traded financial instruments—there is no single source for the price of oil. Estimates vary, but industry sources typically concur that 90 to 95 percent of all crude oil and oil products are sold under term contracts. The remaining 5 to 10 percent is sold on the spot market. Of that 5 to 10 percent, only around 1 percent is sold on exchanges. The rest is sold over the counter. Therefore, one has to collect data from a multitude of sources such as exchanges, brokers, traders, governments and independent pricing agencies.

Mark Haraburda, managing director, Commodity Research Bureau: The common underlying need of a participant in any market is information. This information drives decision-making processes for investments, hedging, speculating and also the manufacturing of goods such as food, energy and metals. Like other markets, there are both static and dynamic datasets for commodity markets that need to be considered. This includes everything from daily and historical prices, fundamentals (supply, demand, production, consumption, etc.), news, and weather, to the underlying specifications of different commodities, such as where they trade, how they trade and even who trades them. Add to this the relationships that commodities have with regional and global economies, as well as politics and other variables, and the potential data needs are as varied as any other market.

IMD: To what extent is this governed by the different user types involved in these markets and their particular business requirements?

Haraburda: It is very much governed by different user types. The data needs vary considerably when you take into account the different users involved in commodity markets. A Commodity Trading Advisor (CTA) offering managed futures investments may offer discretionary, systematic, and market-neutral strategies, each having their own unique data and technology requirements. Meanwhile, a grain merchandiser or an exporter hedging their exposure to corn will need to consider additional datasets like local cash prices or basis, storage costs, transportation and energy costs, as well as currency rates, not to mention weather and even government information like subsidies and tariffs. Or take a fund manager that operates a commodity-based ETF and maintains positions in physical gold and gold-mining stocks or in futures, and must roll those positions each quarter—his decision-making process and data needs are different from the CTA and grain merchandiser.

Commodity Research Bureau (CRB)

Mark Haraburda
Managing Director
Commodity Research Bureau (CRB)
+1 312 506 8705
haraburda@crbdata.com



McDowall: The markets have three or four main types of users—those who use the products physically, such as energy consumers, oil refineries, metal plants, who look at the price of physicals. But if you look at the forward markets, there are companies on the buy and sell sides, such as hedgers or manufacturers who hedge exposure to physicals in the derivative markets. Then you have investors—generally speculators—trying to take advantage of short-term fluctuations in the markets. Then there are commodity funds that focus on gold or base metals, for example, and take a longer-term view. Obviously, all these have a different focus and have different requirements.

Martin: There are three broad categories—hedgers, hedge/traders, and pure traders—each with a specific requirement. Those hedging are just trying to manage their risk, while those trading are hoping to benefit from risk and make money from it. One is using data to protect themselves from the markets, and one is using data to benefit from the markets.

ROUNDTABLE



Krall: The different data needs are not so much determined by the different user types as by the differences in the actual traded products themselves. Financial securities markets enjoy a relatively high degree of standardization in description and clearing, whereas this is a constant challenge for the oil markets. In its extreme form, you have many participants calling the same thing different names, with no common identifier such as a CUSIP number. The specificities are also far more complex, as you have to factor in more variables, such as seasonality calendar rules, transportation constraints, and a range of product specifications. For instance, in defining a fuel oil for use by utility, dozens of quality parameters are specified, and the testing regime for each parameter is also defined. Consequently, more data is required to conduct a trade as the varying specificities impact price.

Carnahan: Commodities are best served by those familiar with their specific underlying industry. If someone is providing data and doesn't know the actual industry itself, it can be hard to trust that data. The many different unique aspects of data for commodities require a strong knowledge of that particular commodity. There are many established sources and vendors that make up an almost complete set of data with true experts maintaining the data. As for the different user types, they all require quality data from accurate sources that can be used across a company—often as part of multiple systems. The flexibility of data is catching up, but there is still more demand for flexibility in using the data with the various systems that make up a company's overall risk and trading platform.

IMD: Do these markets involve a completely different set of end users, vendors and data sources, or do they involve different parts of the same companies?

Haraburda: All of the above. Some firms are vertically integrated in, say, the production, processing and retailing of energy or food while others use commodities to construct investable products or funds that hold futures positions. Others might use over-the-counter commodity derivatives to manage their risk—say, through a swap or customized options contract. Or if you are a proprietary futures trader who trades high-frequency strategies

based on momentum or technical analysis, your needs are also much different. One common ground is the need for underlying commodity prices.

Krall: Financial institutions are where we see a crossover in heavy end users of financial securities and oil market data. However, the crossover is generally limited to mid- and back-office functions. Otherwise, intense end users of oil data are made up of integrated oil companies, national oil companies, chemical producers, storage and transfer providers, utilities, refiners and merchant traders.

Large, well known vendors all have commodity-specific offerings, but there is a plethora of commodity specific software/solution vendors, each with small and specialized sets of components to serve niche markets. Specialist commodity market data sources have multiplied in recent years. Companies accustomed to trading financial security markets will need to source data from commodity specific exchanges and learn to evaluate the relative strength of providers of OTC price assessment providers.

McDowall: They involve markedly different communities. Where overlap sometimes exists is when you have a big oil or mining company hedging by buying or selling forwards through its treasury division. That doesn't mean that trader is sitting next to a guy dealing with currencies, but it does mean that data has to come together in a meaningful way for the financial director or treasurer to look at. Vendors to the futures markets are the usual suspects, and in "softs"—sugar, coffee, grains, etc.—there may be some national or regional players in a particular niche, but commodities data is generally more dynamic. For example, detailed analysis of the amount of copper produced and consumed is of interest to everyone, but people will interpret and use it in different ways.

Carnahan: Commodity markets include a wide variety of vendors and sources to service end users. Different commodities, regions or both provide a list of data sources unique to that commodity and region. Some of the larger data vendors have aggregated most of the data sources into one service, yet still deal with flexibility issues when integrating into various end user systems. Often, the differences come into play when dealing with data that differs from commodity to commodity. Some end users have real-time needs, while others range from hourly, daily, weekly, monthly, to even seasonal demand.

Martin: If you are referring to data vendors, most financial vendors—like Thomson Reuters or Bloomberg—include datasets that are specific to the oil industry. But there are specialist vendors focusing purely on oil markets such as PIW (Petroleum Intelligence Weekly), Platts and Argus Media, which have a heavy slant toward the physical



Shamus Martin
Sprague Energy



activity of the markets. Analytical information comes from consultancies such as Pira Energy Group, which is high-cost and not available via other data vendors.

Winstone: As new markets open, the type of user also expands to include less traditional participants. For example, GFI has been instrumental in developing property derivatives, opening up the asset class to investors who hitherto were unable to access direct property, with new products such as PropertyMatch, a screen-based secondary trading platform for unlisted real estate funds, providing access for a wider base of investors (including major commercial property developers and owners as well as real estate investors and hedge funds). These end users, who would previously have only entered into deals involving physical assets like the development, purchase and sale of shopping malls and commercial office buildings, for example, are now able to use synthetic instruments as a more liquid and efficient route into property investment.

IMD: What additional, instrument-specific data and analytics do these participants require to support their involvement in these asset classes—for example, specialized weather, infrastructure costs, delivery or risk data?

Krall: Additional data and information are critical when trading commodities, as they are heavily affected by real-world events—unlike other markets, where the underlying asset might be an artificial instrument trading neatly on an exchange. A physical oil trader needs weather, storage, transportation schedules and costs, counterparty credit rating, geopolitical risk, exchange data, basis for a differential trade, foreign exchange data and demand forecasts.

Martin: As well as the sources mentioned above—Platts, Argus Media, etc.—in-depth weather reports are also very important.

McDowall: Weather reports are particularly important for soft commodities, just as drilling and extraction data is for mining, and delivery costs and freight capacity available are things you can hedge with forward freight agreements, which fluctuate depending on the spot or forward price.

I started my career in commodities at Merrill Lynch, so I know, for example, that there are warehouse costs to store commodities, and that you have to assess the quality of each warehouse, inspect them regularly, perform physical counts—on top of which there are insurance costs. And none of these prices are static—they vary based on the spot and forward prices.

Carnahan: Involvement in commodities trading and risk management requires specialized systems capable of managing such commercial activity. In addition to this, a myriad of specialized data and analytics is required to support these operations. Specialized data is available by commodity asset class, providing market fundamentals such as supply and demand dynamics. Examples of supply factors include specialized data and analytics

for production, storage, inventory, physical flows and transportation of commodities. Demand factors include data and analytics related to consumption, future demand and relevant economic indicators.



Winstone: As markets are becoming more inter-linked—both in the physical side and in derivatives trading either for investment purposes or for hedging physical positions—the correlations between the various different asset types have started to become more apparent. Much like supply-side logistics, the further down the supply chain a client reaches for information from markets that may impact on the particular asset being traded, the better for the client. For example, there's a correlation between the price of UK power and gas, but there is a perhaps less obvious—but nevertheless just as important—link between the price of a UK power contract, the price of a forward freight agreement for a particular clean tanker route, and the price of a particular coal contract for forward delivery. Trading or looking to position or manage risk without having access to the correlated data points is less efficient and more error-prone. Clients are using more sophisticated hedging strategies by taking positions in what might be considered unrelated markets—for example using FX option puts or calls to manage their currency risk in a particular commodity position. Data requirements in these markets are therefore more sophisticated than they used to be.

Haraburda: Those on the commercial end of commodities will primarily be focused on both cash and futures markets, in addition to the fundamentals affecting these markets. This includes everything from production and consumption reports to hurricanes forming in the Gulf of Mexico or drought in Russian wheat-growing regions. Firms that manage portfolios that include commodities may require pricing from around the globe, covering many exchanges, and sometimes cash markets. Or analysts building systematic commodity trading models may need end-of-day price data for the last 50 years or something much different like tick data from the past year. The software required to monitor and analyze commodity market data may vary from standard real-time applications to powerful pattern-recognition algorithms or statistical analysis software.

ROUNDTABLE

IMD: How is market volatility affecting activity in—and demand for data from—these markets?

Winstone: Hugely—particularly in certain asset classes like freight, where market price volatility has enabled the development of new hedging instruments like container derivatives. The predictability of price and capacity in freight is important to shippers and third-party logistics companies, and when the markets are volatile, cost can eat into margins and volatility can play a large role in undermining certainty—particularly in the forward view of balance sheets and risk. A new derivative specifically focused on container vessels themselves allows these market participants to hedge against such route price volatility. On the wider issue of volatility, the more volatile a market, the deeper the requirement for really good quality data from an interdealer broker operating at the core of these markets—particularly for valuations and risk management. In addition, if clients are able to access real market prices as opposed to indicative or consensus prices, that gives their operations in these two areas specifically a leading edge—and that's where GFI Market Data lives.



Bob McDowall
TowerGroup

McDowall: Commodities are subject to volatility. For example, frosts can impact demand. In times of inflation, there is typically a greater allocation to funds of commodities or companies that are commodities-based... and when there is a lot of financial uncertainty in the equity and debt markets, there is often a shift to commodities, especially metals. Also, most commodities trade in dollars, so are also subject to volatility in the price of the dollar. All of this means there is greater demand for data, but

that this rises and falls according to the volatility and speculative activity—more so than in the securities or financial derivatives markets.

Martin: As volatility continues to grow and participation in oil trading becomes more attractive, the need for data increases continually.

Carnahan: Market volatility attracts attention from hedgers who look to protect themselves from the effects of volatility on their earnings. Market volatility also attracts the attention of speculators who look for opportunity to realize gains. Financial intermediaries such as banks and brokers step in to intermediate this commercial activity and service the increasing pool of customers, and more transactions occur with this rising interest. This is evident in the increasing open interest of financial contracts traded on exchanges or facilitated by clearinghouses. The same pattern occurs with data—as more participants become involved in these markets, data providers expand their offerings to include the assets to meet this growing demand.

Krall: Volatility in the markets results in additional data demands from a wider range of participants as companies become fully cognizant of their exposure. In addition, volatility creates opportunity, and this brings new participants to the marketplace, such as hedge funds boosting liquidity in derivatives markets. When oil reached record peaks of \$145 per barrel in 2008, we noted many more participants entering the market—on the way up and down—attempting to capitalize on the opportunity created by this volatility.

Another effect of volatility on market data relates to volume: While the underlying number of physical trades remains relatively neutral, the derivatives markets tend to see large boosts in liquidity. Under these market conditions, more people are trading derivatives, leading to the creation of more exotic derivatives, which are frequently used for hedging purposes.

Haraburda: Demand for commodity data has never been greater. With the rapid growth of managed futures and commodity-based exchange-traded funds, the need for underlying commodity data by fund managers and individual investors is exploding. You also have more companies using sophisticated techniques to hedge their exposure to price volatility in the inputs they use for the manufacturing goods. In addition, the expanding infrastructure and food consumption of growing nations has placed more attention on markets such as metals and grain, while on the institutional equity side, you have more traditional equity platforms and equity analysts consuming commodity market data. If you are analyzing a company which develops corn seeds or tractors, you also need to be following the agricultural markets. Almost every institutional platform now covers commodity data on a daily and historical basis, and those that don't are at a competitive disadvantage. Volatility in these markets and electronic access to them is certainly a reason for the increase in demand, as are the lackluster returns from other markets like equities over the past decade.

IMD: Will cross-asset trading strategies drive interest in this data and distribution technologies?

Winstone: Absolutely, but not only in those two areas. Good-quality data is essential, as is the ability to access that data in a timely and flexible way. But we are also seeing an increasing interest from clients in being able to access cross-market services from companies like GFI that can offer access to liquidity pools, pre-trade price discovery tools (including analytics that use both live and historical data, but also human expertise), to a hybrid execution capability that includes electronic and voice trading competencies, and choice in clearing venues. These markets have always been correlative, but clients are becoming increasingly sophisticated in harnessing those correlations and trading across the assets. And it's not only cross-asset trading but also a globalization of trading interest. Historically fragmented markets have meant that interest in pricing data and trading strategies specific to those markets has been somewhat regionally blinkered. At GFI, we are see-



ing more interest in pricing data for non-domestic markets as clients look to expand their portfolios beyond their own borders. This has meant that we have needed to expand the trading and data capabilities in our products to be more global in nature, to give our clients a more rounded view of these markets overall.

McDowall: People are now comparing deposits to returns on gold or silver, and whether they can get a better rate of interest by investing in gold overnight than in the money markets. These strategies are quite dynamic—you could be looking at mining stocks versus the metal they produce, or energy company stocks versus the oil and gas markets—and trade commodity against commodity or commodity against securities. But I think these are perhaps not as well-developed or as well-articulated as for financial instruments, since they tend to come and go according to demand for a particular commodity.

Haraburda: This interest has grown dramatically over the past several years. Investments in managed futures alone have doubled in just a few years. As many hedge funds have provided flat or negative returns, you've seen more investment firms offer managed futures portfolios or diversify existing portfolios by adding futures positions, leveraging the low or negative correlation that different commodities have with traditional assets to reduce risk and enhance returns in both bull and bear markets. This benefit is well-researched, and translates into an increase in demand for this data, as well as new technologies to access and analyze it.

Martin: Yes, it is the future. You can no longer focus on one commodity as you could in the past, given that commodities are treated as asset classes and interact globally.



Sean Carnahan

Global Director, Commodities and Energy
SuperDerivatives
+1 832 598 7326
www.sdgm.com



Carnahan: Data is the cornerstone of making sound trading and risk management decisions. Cross-asset trading strategies further emphasize the importance of having robust, accurate and reliable data. These strategies involve multiple, interconnected markets, so monitoring those inter-relationships is key to having the required data.

Krall: We have already seen an increase in financial players in the commodities markets who see them as just another asset class and this has already driven interest in the data and distribution technologies. They have little or no interest in holding the underlying physical asset, and consequently have different trading habits—risking limited amounts and taking new positions quickly and frequently. These new incoming market participants are boosting volumes and introducing new instruments, which in turn increases the amount of data available and the demand for it.

IMD: What are some of the data-related issues that will contribute to the evolution of these markets in future?

McDowall: I would have to come back to unstructured data, and how you isolate, analyze and present that—it could be a weather forecast, a crop outlook, a mining survey, or publication of the levels of copper extraction in Chile, for example—to those taking decisions on allocation or buying and selling forwards. Unstructured data is more important in these markets than in equities or debt markets, and these markets have more facets to them.

Martin: Anything that is paper-based or email-based will have to become real-time. The desire for the speed of the information is increasing.

Krall: Data standardization resulting in increased automation will help support increased trading volumes. It will also facilitate the entrance of new players who are unfamiliar with commodities trade processing. Several competing standards and protocols (e.g. FIX and XML) have emerged, and while these are well-intentioned, a lack of agreement on adoption makes global standardization difficult to achieve.

Haraburda: I'd highlight two things. On one hand, the sheer number of futures being listed on commodities around the world translates into operational challenges for both market data consolidators and consumers. And as more markets emerge, the cost of accessing them increases for both distributors and end users. At the same time, you are seeing an increase in the use of OTC markets for commodity-based forwards and derivatives. In some cases, this could mean less price transparency, and make it much harder to acquire data. That said, these same OTC instruments exist because their end users might find them more suitable for their needs, compared to listed derivatives. At the end of the day, the impact of data-related issues on the evolution of commodity markets really depends on the type of end-user, and as I've highlighted, these needs are quite varied.

Carnahan: As data becomes more available, granular and accessible, market transparency increases. Transparency improves a market's future prospects and raises liquidity levels. Thus, without accurate, observable and reliable data, the evolution of these markets will be hampered. ■

SPONSOR'S STATEMENT

Power to the (Back-Office Accounting Data) People

Real-time data is a critical input for trading desks, but is rarely found in the back office, where manual processes for capturing and inputting prices into applications reign. But is the increased risk worth the cost saved by not automating the process?

Renee Krall, global product manager for market data at Platts, explains why automating back-office price feeds pays off.

Most companies in the gas gathering and processing fields realize the critical nature of accurate and timely spot and contract pricing. For this reason, they have service contracts to obtain real-time price data. Traders rely on these automated price feeds because without immediate access to reliable pricing, they risk compromising their performance and company profits.

But when it comes to the back office, some firms do not consider automated price feeds and real-time prices a necessity. The timeliness of prices in the back office is not as critical as it is for traders, because most of the accounting functions occur several days after finalized pricing. Instead of using automated processes, back-office staff manually enter prices into various systems and spreadsheets. It's common to hear executives say they can justify the costs of automated feeds for their traders, but not for the back office. Unfortunately, they may not realize the real cost of relegating the back office to manual processes.

Understanding the growing difficulties associated with manual processes is one thing. However, making financial sense of automating back-office price feeds requires a broader view, including an understanding of the costs, the level of financial impacts, and the associated risks of manual price input. Here are some key reasons for automating back-office price feeds:

Reason One: Save Time and Reduce Costs

There are two main costs related to a manual back office: First, the staff cost required to input prices, and second, processing costs for prior period adjustments due to price corrections. Together, these may cost more than you think.

Look beyond the cost of manual price input: Historically, the most common cost used in developing a business case to automate pricing was the elimination of the manual labor involved in inputting prices. Even with an extensive number of indexes, the labor to enter prices still represents less than one full-time resource. Additionally, since the work takes place during a particular time of the month, that resource is probably used for other tasks, and would be hard to eliminate.

On its own, this cost may or may not be enough to offset the costs of automating price loads. However, when you add keying and transaction errors to the equation, the "cost" of that resource suddenly goes up. Most organizations that use manual price input have centralized it to one individual who then circulates these prices throughout the organization. This means that any error has a ripple effect throughout the organization. Even in cases where the price is entered correctly up front, it may then be changed by mistake or entered incorrectly elsewhere.

And don't forget to add in the accounting costs: Making corrections before the price closes takes time and additional effort. However, if a firm finds out that a price was entered incorrectly only after the monthly accounting close, that can be even more costly. The accounting costs for a single price change are significant. In an analysis conducted by an independent consultancy for Platts, one large midstream gas processing company stated almost 25 percent of its accounting staff's time is spent handling corrections. This is not unique to this particular company—others in the midstream segment spend similar amounts of time on corrections.



Renee Krall
Platts

Reason Two: Reduce Other Financial Impacts

There are many financial impacts caused by incorrect reporting of financial information that occurs because of inaccurate accruals or needing to adjust previous earnings, such as financial accruals, earnings restatements and the need to hedge.

Most publicly traded oil and gas companies generate accruals due to the timing of the information and close schedule. These are typically based on current-month pricing. Incorrect pricing entries could cause material differences in reported financials and lead to audit headaches.

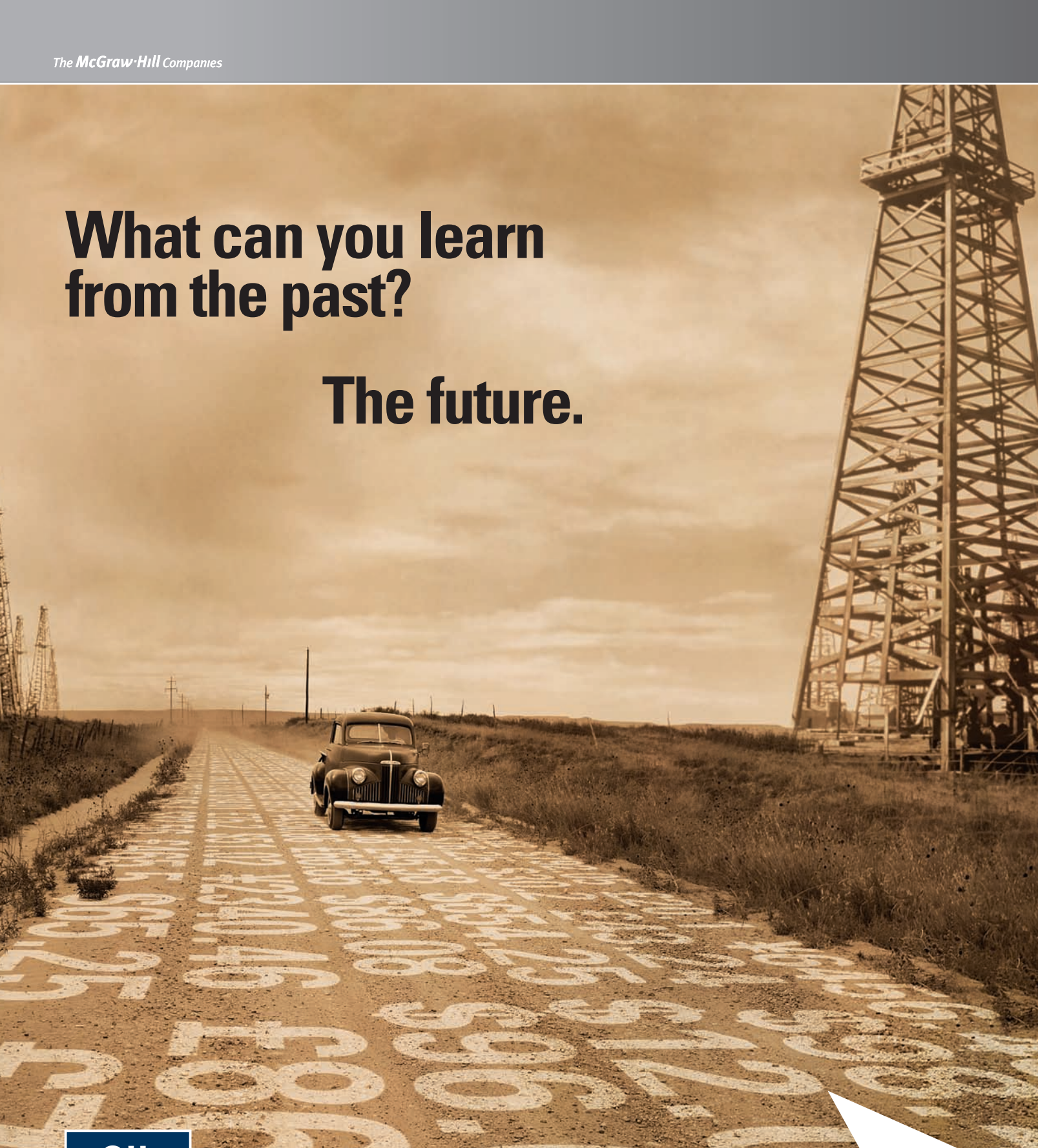
Another potential impact is earnings restatements. Manual input errors are ticking timebombs that can blow up when discovered. The same could be true for index corrections. The longer it takes to discover these mistakes, the higher the costs for fixing them, and the greater the exposure to financial reporting.

Hedging has become a vital risk management practice for many companies. Determining your hedging strategy involves understanding your current position. The relationship of contract prices to index pricing partially affects your position. Incorrect historical information as a basis could affect hedging decisions.

There is no doubt that making the transition from manual back-office pricing input to an automated system can save you time, money, and can reduce risks. Those who choose to move forward with automated pricing feeds and eliminate manual price entry will quickly realize that making the change really pays off. ■

What can you learn from the past?

The future.

A vintage car is driving on a road that is composed of large, white, three-dimensional numbers. The road stretches into the distance, flanked by dry, grassy fields. In the background, several oil derricks are visible against a hazy, orange-tinted sky. The overall scene suggests a journey through time and data.

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Saddle Up New Architectures to Ride Out Reforms

Firms will need robust and flexible data architectures in place if they are to emerge intact—or even as winners—from a pending round of regulation of the US commodities markets, says Sean Carnahan, global director, commodities and energy at SuperDerivatives

A major mandate from the recent Dodd-Frank reform focuses on preventing manipulation of the market by major traders, and by January 2011, the Commodity Futures Trading Commission aims to take a step towards this goal in the commodities market by posting new limits for holdings of energy and metals futures.

With only weeks to go, there seem to be some key decisions yet to be made. For example, CFTC chairman Gary Gensler has still to set these limits—it's a tall task, and one that has many energy and metals traders on a hold pattern, waiting to see whether or not they will be in compliance with the new rules. Indeed, many traders believe the main risk they are facing is the reform itself.

To meet its deadline, the CFTC must first overcome a number of hurdles. One serious hurdle is that the CFTC needs information—and lots of it. Over the next couple of months, it expects to have a massive influx of information and data from the public as critics of the reform send in their feedback during an open for comments period.

The commission also needs a huge amount of accurate and reliable reporting data from market participants—including real-time data for intraday limit monitoring—to establish the new limits effectively. Some of the sources of this data have not yet been finalized, and the task of locating it is becoming more urgent as the January deadline approaches.

Some commissioners feel the CFTC does not need this data to set the limits, and believe in taking a similar approach as was taken to the initial European carbon trading reform—i.e., setting the limits high now and adjusting them once

the data is in. Unfortunately, this tactic didn't seem to work out too well for the emissions reform in the European market—in fact, for many, it caused widespread confusion and disruption.

Meanwhile, the industry dogs are barking. They want these limits posted. Multiple agencies and lawmakers are consistently pushing and criticizing the commission for not meeting their deadline. Yet there aren't any real consequences to the CFTC not hitting the deadline, and commendably, the commissioners all seem to agree on one point—it's better to get this right than risk doing it wrong just to meet an arbitrary deadline.

Whatever the outcome, participants must be well prepared if they are to survive these major changes without disruption to their business. A key element to this is the paramount need for accurate, trusted, and timely data and the proper tools to ensure regulatory compliance.

Opportunity

While the CFTC is determining the rules and limits, there is an opportunity for industry participants to take the time to discover the most efficient route to integrate and manage data. This means that firms might finally have to migrate away from using Excel spreadsheets—especially those integrating and using data in several systems simultaneously—and adopt a more flexible architecture that is capable of accessing and using data from any source and in any format.

When companies review their current data systems, they often find a number of significant gaps resulting from the use of disparate data sources and as a result of human error in the process of transcribing sheets by hand. The costs associated



Sean Carnahan
SuperDerivatives

with this have become very apparent in the current climate—not only are these companies losing money, but they are risking falling short of compliance at a time when transparency is in the spotlight. The high level of risk associated with relying on spreadsheets means that, more often than not, the benefits of adopting a true data architecture far outweigh the initial cost and effort.

Change, as they say, is coming, and many participants are coming around to the idea that it is better to catch up now than face possible fines and business disruption further down the line. In the long term, having the right data architecture, sources and services will allow them to move forward into the reforms with a strong competitive edge.

The values of being able to quickly access, manage, and use data across an enterprise without latency and lengthy integration periods must not be underestimated as firms prepare for the coming reforms. Data fragmentation can cause serious problems for both compliance and overall risk management. This may be a daunting task for those who have trusted their hand-coded Excel sheets for years, but one that is critical to increase transparency across the industry.

So, should you invest in new architecture to manage data? If you don't, you risk being swept away by the wind of change and the reporting and compliance requirements it brings with it. Now is the time to build a solid foundation for your energy and commodity risk and trading systems. Just like the CFTC, it's best to take your time and get it right the first time round. ■

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