WHITE PAPER

Risk Monitoring & Management Trends in Commodities

Sponsored by

Allegro
Commodity Management

Commodity Technology Advisory
CTRM Market Research, Analysis and Insights

INTRODUCTION

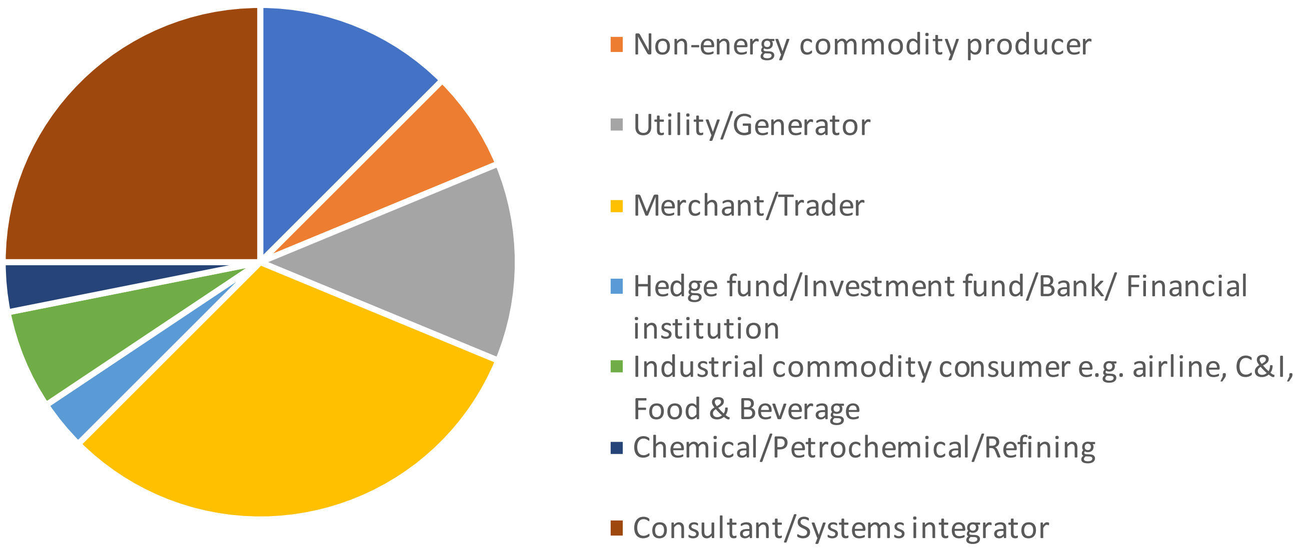
Commodity producers, traders, and industrial consumers are all facing a barrage of risks such as price exposure and cyber vulnerability, as well as legal, credit, operational and market risks. The risks associated with buying, selling, and moving commodities only seem to be increasing exponentially with greater regulatory oversight and a broadening of supply chain operational issues like traceability. Many of these risks can be business killers – the actions of rogue traders or the impact of counterparty business failures, for example – and lead to fatal damage such as an inability to access capital or damage to brands (via issues around sourcing commodities or producing substandard end-products). Other risks, such as ineffective price risk management, inefficient scheduling of transportation, or regulatory non-compliance can erode profitability and damage the company's ability to execute on strategic plans and growth initiatives.

Of course, often where there is risk, there is also an opportunity to profit - but only when those risks are recognized, effectively managed, and properly mitigated. The rise in stakeholder scrutiny and regulatory oversight also means that being able to demonstrate effective risk management across the organization is certainly more important today than ever before.

Recently, Commodity Technology Advisory LLC (ComTech), with the support of study sponsor Allegro Development Corp., undertook a snapshot survey of the industry to find out more about the types of risks faced by trading companies and to gain an indication of how and where those risks were being managed. The increasing gravity of undertaking proper and effective risk management means that the enterprise is now often more focused on these risks at the corporate level with a senior executive, usually the Chief Risk Officer - tasked with recognizing and mitigating risks and defining and implementing effective risk policies. While some risks are managed primarily at a departmental level on a day-to-day basis, these activities are usually a part of the overall corporate risk strategy.

Survey respondents generally represented major commodity-focused companies like Shell, Glencore, Noble, ConocoPhillips, ACES Power, Hoogwegt Group, RWE, and Groupa Lotos, and the roles of the respondents included Chief Risk Officers, Risk Managers, IT Managers, Directors, and other business function managers. Figure 1 shows the types of companies that they represented - showing a reasonable and representative sample of different types of company from producers to consumers.

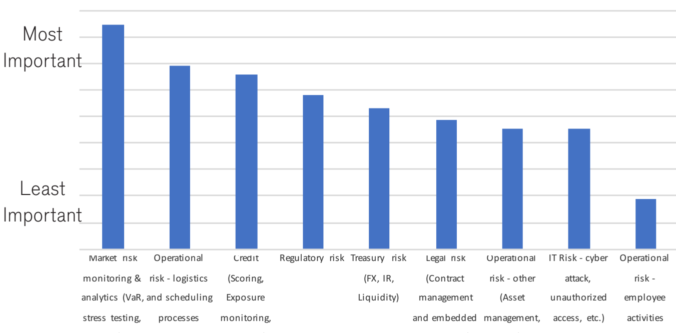
Figure 1: Respondents' Demographics



ASSESSING THE RISKS

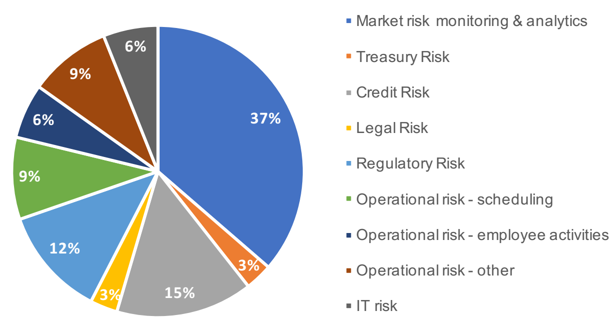
For a majority of the respondents, market risk appears to be most important risk facing their organizations. Market risk generally incorporates price risks along with analytical analysis such as calculating Value at Risk (VaR), performing stress tests, and mark-to-market monitoring and reporting. The least ranked risk was identified as operational risks due to employee activities (including, for example, rogue trading). All other forms of risk were really quite closely ranked together (Figure 2) when scoring the responses demonstrating how broad and varied risk management has become in the commodities industry.

Figure 2: Overall Ranking of Risk Types Posed to the Business



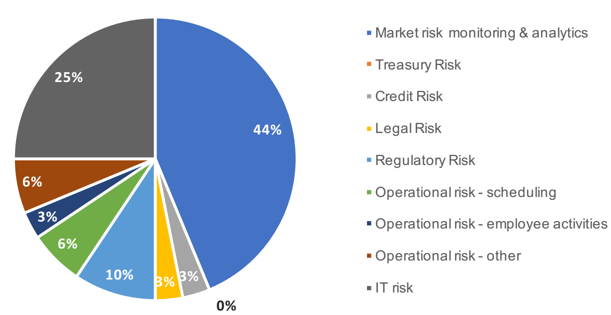
The respondents also overwhelmingly see market risk as the largest commercial risk factor facing their companies (Figure 3), with more than a third of the respondents citing it as most important to them. The next most important was credit risk with just 15% of respondents citing that risk. Overall, the three most important commercial risks facing these respondent companies then are market risk, credit risk, and regulatory risk - representing 2/3rds of respondents in total. These results were even more magnified when asked about the most important risks to the individual respondents in their roles.

Figure 3: Relative Important of Types of Risk



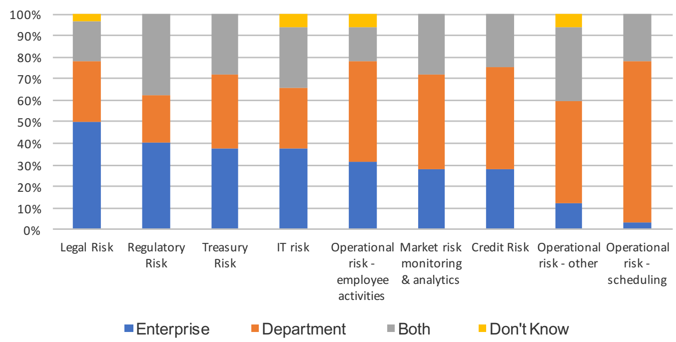
Market risk rose to almost half of the respondents in importance to them in their jobs while credit risk rose to a quarter of respondents (Figure 4). Again, Market risk, credit risk, and regulatory risks combined represented 89% of the responses and were the most important set of risks to the respondents in their roles.

Figure 4: Relative Importance of Risk Types to Respondent



Where are the different risks managed? According to the respondents, most risks are managed at both the enterprise and departmental levels as might be expected. However, whereas legal, regulatory and treasury risks have a strong enterprise management aspect, operational risks like scheduling are more often managed at the department level. However, the data does suggest that there are broad differences in approach across the industry as there seems to be little agreement between the respondents on which risks should be managed at what level (Figure 5).

Figure 5: At What Organizational Level are Risks Best Managed

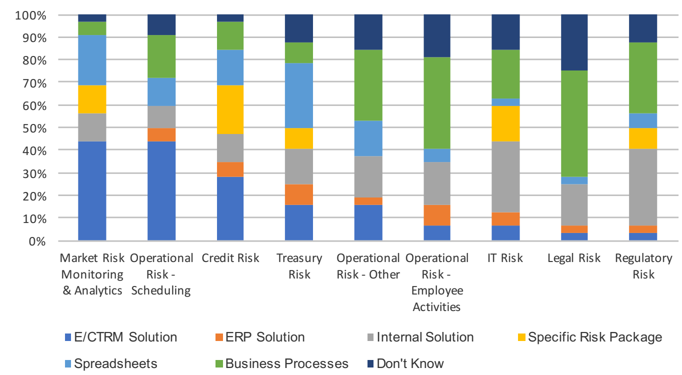


Finally, we asked the respondents how risks were measured, monitored, and managed. The CTRM solution was most often used to perform these activities only for market risk, scheduling and credit risk (Figure 6). Specific risk tools or software were also often used in market risk, credit risk, treasury risk, IT risk and regulatory risk.

Spreadsheets continue to be popular risk management tool for market risk and treasury risk specifically, while business processes and controls were mechanisms often used for operational risk management, legal risk and regulatory risk. Internally developed solutions were also sometimes deployed in areas like regulatory risk, IT risk and legal risk.

Given the depth of concern over effective risk management, there isn't significant agreement among the respondents on how to manage risks systematically. However, the continuing use of spreadsheets in particular as a risk tool causes concern for a number of reasons. Aside from well-publicized issues related to errors and omissions, spreadsheets are not easily scalable and the data and information on which risk decisions are made can become cloistered within an organization. This reliance on tribal knowledge introduces any number of additional potential risk variables, and as such, spreadsheets should not be considered a replacement for enterprise grade, commercial-off-the-shelf commodity trading and risk management solutions.

Figure 6: How are Risks Managed?



The low number of respondents noting that their E/CTRM systems are utilized to address many of the common risks faced by market participants is somewhat surprising in light of the broad and sophisticated capabilities offered by the larger market leading system providers like Allegro.

The latest systems from several of the largest vendors have been continuously updated to provide a breadth of capabilities to help manage both "traditional risks" like market/price risks, and emergent risks such as regulatory. That being said, the respondents were not required to note their current systems in use and it is likely that some, or possibly many, are: 1) using older versions of E/CTRM systems that have not been updated to the latest capabilities; 2) using less capable vendor supplied solutions that do not offer in-system capabilities for managing risks such as credit, treasury, or regulatory; 3) simply haven't adopted or implemented, for whatever reason, the full breadth of capabilities available in their current E/CTRM systems; or 4) have not adopted a commercially supplied solution and are instead relying on spreadsheets for their required E/CTRM functionality. Regardless of reason, a full featured E/CTRM can, in many cases, be the best solution to forecasting, measuring and ameliorating many of the ever increasing breadth of risks now facing the commodity markets.

ALLEGRO HORIZON - HOLISTIC RISK MANAGEMENT

Oftentimes, commodity professionals know they need sound risk management, but they suffer from poor data quality and latencies brought on by the disparate systems or spreadsheets they're accustomed to using. When that's the case, their exposures can be obfuscated, and the risks associated with trading, logistics and accounting increase considerably.

Whether your enterprise is using loosely integrated solutions, legacy in-house software or years-old spreadsheets, Allegro Horizon will provide you with an enterprise commercial-off-the-shelf solution for commodity trading and risk management. Allegro Horizon is an integrated commodity trading and risks management platform that allows for comprehensive physical and financial data management, which aids in improving the risk mitigation capabilities throughout your organization. With native cloud capabilities, Allegro Horizon improves agility and allows you to do more with less by significantly reducing your capital expenditures and increasing focus on your core business.

Allegro's commodity risk management solution empowers risk managers by giving them the visibility they need to address potential problems in their beginning stages before they have a larger impact on operations and the bottom line. Specifically, risk managers can use Allegro Horizon to drill down into their exposure to market, counterparty and credit risk by leveraging third-party pricing and credit data. This translates into real-time insight KPI reporting and decision support, leading to better P&L management.

SUMMARY

The overall sense provided by this survey is that while the number of risks (or awareness of the many varieties of risks) are increasing, much of the focus is given to market, credit, and regulatory risk exposures simply because these are believed to be the most serious in terms of their ability to inflict commercial damage. These are also the areas in which most staff appear to be focused when thinking about commodity risk management. Of course, it can be argued that this very much depends on the role of the respondents but the sample included mostly director-level and senior staff.

Interestingly there does seem to be an increasing sense that risk management is an enterprise function - from a strategy and directive sense anyway - with most risks being primarily managed at an enterprise level, or at both enterprise and departmental levels. The exceptions to this are operational risks like scheduling that is best managed at a departmental level within guidelines set by the executive.

Finally, the mix of systems and approaches used to manage all types of risk is perhaps surprising particularly the use of spreadsheets; suggesting perhaps that commodity trading companies still has some way to go in finding and/or adopting comprehensive tools to help manage risks - even if those tools may be currently available to them in their existing E/CTRM solutions.

ABOUT ALLEGRO

Allegro Development Corp. is a global leader in commodity trading and risk management software for power and gas utilities, crude oil refiners, chemical manufacturers, oil and gas produces, agriculture companies, traders and commodity consumers. Allegro's software provides a comprehensive solution for position visibility, risk management, controls and regulatory compliance.

With over three decades of industry experience, Allegro's enterprise platform drives profitability and efficiency across front, middle and back offices while managing the complex logistics associated with commodities. Headquartered in Dallas, Allegro has offices in London, Singapore, Calgary, Dubai, Houston, Jakarta and Zurich, along with a global network of partners.

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ABOUT

Commodity **Tech**nology **Advisory** **LLC**

Commodity Technology Advisory is the leading analyst organization covering the ETRM and CTRM markets. We provide the invaluable insights into the issues and trends affecting the users and providers of the technologies that are crucial for success in the constantly evolving global commodities markets.

Patrick Reames and Gary Vasey head our team, whose combined 60-plus years in the energy and commodities markets, provides depth of understanding of the market and its issues that is unmatched and unrivaled by any analyst group.

For more information, please visit:
www.comtechadvisory.com

ComTech Advisory also hosts the CTRMCenter, your online portal with news and views about commodity markets and technology as well as a comprehensive online directory of software and services providers.
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