Shabd Braham ISSN 2320 – 0871
International Research Journal of Indian languages 17 January 2015
Peer Reviewed Research Journal

Commodity Market & Risk Management

∗Dr. Sanjay Pandit ∗∗ Mrs.Janvi Chandwani
∗Hod In Commerce Dept. ∗∗ Researcher
Mata Jijabai Govt. Girls P.G.College
Indore (M.P.), India

Abstract

Commodity price volatility and market complexity is the 'new normal'. These impact businesses across different industry sectors in different ways. We see markets for commodities becoming more complicated as regulators introduce significant changes to the way commodity markets are controlled. These changes mean organisations must understand the importance of managing uncertainty and other variables effecting financial performance. With this in mind companies are engaging in commodity trading to add flexibility to their financial position characterised by a collective view of risk and a desire to create certainty in commodity price management.

Commodity trading companies require a more consistent approach to monitoring,measuring and managing market, credit and operational risks. They can also gain valuable insights from investment banks many of which must tighten up risk management procedures in the wake of recent financial crisis.

A fly on the wall at a commodity trading company might make a few observations about the firm's approach to risk management. It would notice that different types of risk – such as credit or market risk – were often managed by separate departments, and these would also employ differing tools, methodologies and techniques. It would observe that credit and market risk commanded the lion's share of risk managers' time while operational risk was still being largely overlooked. It might also notice that risk managers spent most of their time monitoring risk, less time measuring it, and an even smaller amount of time actively managing it.

Keywords:- Commodity, Risk, Market, Management, Business, Financial, Company

Introduction

Greater liquidity, increased participation of financial players, new types of exchanges and new types of commodities, such as emission rights, have all contributed to the growing importance of the use of financial instruments and, in some sectors, trading. The increase in commodity trading in markets affecting oil and gas, power utility and mining companies has an impact on short- and long-term contract prices, on price volatility, on the choices faced by end-customers and on the regulatory landscape governing markets. Companies are increasingly engaging in trading to optimise and add more flexibility to their asset position. More and more, oil and gas and power utility companies in particular are involved in commodity mechanisms that are financial rather than physical in nature. In mining, physical transactions remain predominant but, again, rising and fluctuating commodity prices make the management of commodity risk an important part of their activities as they increase production to meet growing market demand.

These changes are producing new types of risk for companies that require a re-examination of their risk strategies and the way they conduct their risk management. Companies need to understand and engage with the market environment in ways that are consistent with their commercial imperatives and risk appetite. Crucially, they need to be sure that they have the risk frameworks, controls and systems in place to manage risks and opportunities effectively.

The infrastructure and resources required to manage this complexity gets more expansive and costly by the day. As a result, companies face a broad spectrum of obstacles or risks when change is

contemplated that threaten their 'go-to-market' quality. The inability to manage risk stymies adoption of change initiatives reduces the scale of change that is initiated and many times leads to failure for those that are adopted.

Additionally, as companies seek answers for failed initiatives and/or lost opportunities, it leads to assignment of blame and costly changes. Many times this leads to replacing the advertising agency or reassigning responsibilities via organizational changes. A supporting organizational trend is a new position titled Chief Commercial Officer, where responsibility for driving top line revenue is assigned for complex operating environments. Typically, these are all too narrowly focused and many times lead to additional complications.

Progressive marketing organizations recognize that managing risk is the responsibility of the entire marketing organization. It is not compartmentalized within different functions or assigned to a single position but rather seen as a key practice for developing and executing the marketing plan. Until recently, this idea of end-to-end risk and performance management as a key activity in the marketing organization has been practically unheard of. But, increasingly, senior management is looking to marketing to enable, if not drive, short- and long-term business growth, all while improving accountability, transparency, and speed to market.

Risk management allows marketing to take on the myriad of go to market obstacles necessary to facilitate business growth within this complex environment. Properly configured and executed, it provides an opportunity to improve business return with greater quality, resilience, and predictability across the marketing enterprise.

A Framework for Marketing Risk Management

Successful marketing initiatives require a disciplined approach that balances objectives with the management practices and tools to develop expectations, plan expenditures, and monitor key activities.

A multi-tiered platform of business objectives, performance indicators, risk factors, and control factors should be developed in concert with the traditional marketing process of strategy development, marketing planning, execution and evaluation.

This development platform should consist of the following factors:

Business Objectives: Executive goals for the company that feed the marketing Key Performance Indicators (KPI's)

KPI's: Marketing metrics that track how marketing delivers on their requirements for the business objectives. They are generally market based/focused and results oriented. These KPI's feed the Key Risk Indicators (KRI's)

KRI's: They focus on the operations of the company and are generally informational (changes in customer preferences, behaviors and demand), strategic (poor strategy validation and prioritization) and operations (ineffective people, processes and technologies) based. They are the impediments to realizing good results on the marketing's KPI's. They forecast the hazards and permit the organization to decide on what is required to mitigate it. These generally feed the development of the Key Control Indicators (KCI's).

KCI's: They are governance related and help manage the processes to achieve the objectives. They are so companies don't hit a risk indicator; they are the resources, controls and "mitigators" to manage the risk.

This platform connects the marketing strategy with the multi-functional execution within the company. The tiers of indicators reflect the cascading of top level management objectives with the day to day management of marketing programs and

supporting operational activities. Marketing organizations today face significant challenges when contemplating change to their strategies, execution processes, information and people. Operations, Logistics, Finance, Sales,Trade and Marketing Agency environments are increasingly more complex as they strive to position for changing consumer behavior, channel proliferation and the demands of innovation.

Improving Consistency of Risk Management

There a number of compelling reasons for commodity trading companies to improve consistency in their risk management processes. Firstly, companies need to be better prepared to deal with the impact of another investment bank or large energy trading company failing. Secondly, shareholders require the reassurance that businesses understand the risks they face and are sufficiently protected against them. Thirdly, where risks are understood and managed appropriately, access to investment capital is improved. Fourthly, while regulators are focusing on investment banks at present, they are also looking at the commodities markets more closely. New measures have been proposed by the CFTC, including possible position limits on a range of commodity contracts. These and other proposals currently under consultation would create the need for changes to commodity companies' risk management procedures, monitoring processes and potentially even have an impact on their business strategy.

Market Risk

Although risk managers at commodity trading companies have attained a considerable degree of sophistication in relation to market riks, firms tend to be skilled mostly at monitoring and measuring market risk. Commodity businesses need to adopt a much more dynamic approach towards the management of market risk and efficient utilization of risk capital. Firstly, trading companies should identify any risks not captured in their current risk management or VaR framework and include these in the programme list for prioritization. Having all risks flowing through the VaR framework improves the completeness and quality of risk management, as well as reducing the requirement for manual intervention. In order to manage market risk more dynamically, energy companies (like banks) should make greater use of stress testing. Stress testing must become a regular part of their risk modelling process and not simply be used as a standalone measure. It should incorporate varying probability weights, so thatfirms gain a better understanding of the risk range, and include historical scenarios.

Credit Risk

Traditionally, while credit risk has always been an important consideration, the main focus within commodity trading companies has been monitoring of counterparty credit risk and limiting counterparty exposure by applying credit lines – the credit risk managers' primary responsibility has been to make certain that trading remains within these limits. Most of the initiatives taken to improve efficiency in this area have been aimed at optimizing this credit risk monitoring process. While firms are skilled at monitoring credit risk, they still need to improve the way credit risk is measured and adopt a more active approach to its management. Turning first to the measurement of credit risk, many energy trading businesses only measure credit risk as *current* exposure. They should, in fact, give more attention to potential *future* exposure (PFE), which is more consistent with the measures used for market risk. Firms should also be aware that developments have occurred in the way PFE is measured, with more sophisticated organisations using Monte Carlo and variance/co-variance techniques.

Businesses need to make use of what is appropriate to their needs – avoiding over-engineering and selecting techniques that fit the firm's activities. Importantly, commodity trading companies need to manage credit risk more actively. Firms should invest in capabilities which allow managers to drill down into risk results, in real-time. These capabilities aid firms to gain an understanding both of the contributors to risk and provide an insight into where it is concentrated. They also enable companies to identify positions or trades which place a counterparty significantly outside the normally acceptable limits of risk. Such credit exposures can then be hedged by trading credit default swaps, thereby also realizing value from price arbitrage between the various counterparty credit spreads, an approach often used by investment banks. On a daily basis, a company needs to identify deviations from its approved risk distributions policy by identifying high risk counterparties so as to manage marginal credit risk actively. It could reduce risk by going long credit default swaps against the high risk counterparty and possibly bring VaR to consistently lower levels, without having to lose out on the benefits of dealing with 'higher risk' market participants. The company could also choose to bring the VaR back in line using other routes, for example, through the use of central clearing, netting, identifying a natural hedge, by asking for additional collateral or even exchange trading.

Liquidity Risk

Trading liquidity risk (an area which overlaps with market and credit risk) is another field in which companies should consider introducing a more consistent approach to monitoring, measuring and managing risk. If liquidity falls when an energy trading companies carrying out a transaction, and the company buying cannot unwind or hedge the position fast enough, liquidity risk is created. Investment banks actively manage trading liquidity risk by monitoring the market bid-ask spreads and build this into their market making and pricing models. Energy companies need to consider this aspect and build a charge into their pricing models, both to avoid falling into a liquidity trap and to manage trading liquidity risk more efficiently.

Operational Risk

Operational risk management is, generally speaking, in an immature state at most commodity trading companies: businesses tend not to have dedicated operations risk managers, nor is operational risk understood to a sufficient level. Companies are only now beginning to monitor trading operational risk, while its measurement is still in its infancy. Indeed, the industry is only just becoming aware of the need to use benchmarks or metrics to measure and understand operational risk. As with other types of risk, there can be no proper management if companies have no adequate means of monitoring and measuring it. One example of particular weakness is trade confirmation. The process is riddled with delays and, even at large companies, can take up to a few weeks, depending on the complexity of the transaction and issues encountered in the contract terms and so forth. If a counterparty fails in the intervening time, the impact is likely to be significant and may involve hardship. In contrast, a number of investment banks are now able to process confirmations quite rapidly. Commodity companies should aim to emulate financial institutions in this respect –measuring confirmation times against industry benchmarks, both to improve efficiency and to reduce the risk of being unable legally to enforce an unconfirmed trade, in the event of counterparty bankruptcy. An understanding of the potential financial impact might focus attention. Invoicing constitutes another problem area. Here, similar delays can occur to those encountered in the confirmation process,

with complex pricing terms and delivery quality issues often being the root cause of the delay. Again, commodity businesses would do well to put in place metrics to measure and monitor operational processes such as invoice generation. This, in turn, would allow firms to identify weak spots and to take remedial action. Finally, for firms operating in the physical commodities arena, other types of operational risk need to be considered. In particular, businesses need to assess the efficiency with which physical assets operate. In this respect, metrics aimed at measuring the commercial availability of an asset can also play an important role. Indeed, some large energy firms already make use of these metrics. For businesses that do not yet carry out these assessments, forming partnerships with agencies which undertake benchmarking exercises of operational processes will prove beneficial.

Hedging

The key activity by which a company's management may decide to mitigate the impact of commodity or currency price volatility is through a systematic programme of hedging. However, one of the recurring issues that arises, when assessing the value from hedging, is the lack of clarity over what, precisely, the company is trying to achieve. The objectives of a hedging programme should, of course, be aligned with the overall financial expectations of the company's stakeholders (including but not limited to investors). In practice we find this value proposition is often not very clear. Typical stated objectives might be:

to reduce earnings volatility;
to protect a specified minimum cash flow;
to hedge a fixed portion of production;
to monetise the value of the commodity in the ground;
to outperform budgeted targets;
to protect existing or anticipated underlying cash in relation to physical positions/investments;
to guarantee prices to customers;
to hedge exposure based on sales projections/orders;
to keep within pre-determined price ranges.

Executing the hedging strategy:

A hedging programme requires investment in infrastructure and governance to support various functions, including risk analysis, deal execution, reporting, settlement and accounting. Considerations should include the following :

Understand the range of financial instruments or derivatives available in the marketplace to mitigate exposure to the identified risks.

Evaluate the benefits, costs and risks associated with the proposed strategy and tools to be used.

Consider direct transactional costs (bid/offer spread) for using hedge instruments such as futures, forwards, swaps and options.

Consider potential systematic costs of hedging reflected in the shape of the forward price or yield curve.

Consider the increased management and operational costs for the establishment and implementation of required systems.

Consider increased compliance costs associated with accounting, legislative and stakeholder requirements.

Consider how the hedges to be used will qualify under the new accounting rules.

Any hedging programme where the full economic effects are not properly understood, controlled and managed, whether or not derivatives are used, can have disastrous consequences for an organization, its employees, customers, suppliers and other stakeholders.

Conclusion

Individual commodity trading companies have attained differing levels of sophistication in relation to the monitoring, measuring and managing of market, credit and operational risk. Nevertheless, in the authors' experience, the bulk of firms should consider taking a far more consistent and

holistic approach to risk management. In particular, companies must abandon old attitudes which view market, credit and operational risk as separate heads and operational risk as the 'poor relative' of the other two. In contrast, firms need to establish where the risks overlap in their businesses and quantify these interactions in a consistent manner. Companies must become more sophisticated in the measurement of risk, as well as active in its management. Finally, businesses should ensurethat similar types of tools and techniques are employed, across all types of risk, in order to ensure its consistent management and help provide a more enterprise-wide view of risk.

The physical and the financial looks at the new commodity risk challenges facing companies in the oil and gas, power utility and mining industries. It also looks at the specific challenges that arise within each of the industry sectors. Key questions such the role of trading and hedging within company strategies are examined as well as how best to get key building blocks such as organisational structure, tax, valuation and accounting right. Finally, we conclude by looking at what companies should do to embed effective risk management in this new environment across the whole of their company.

References

1 Akey, R., 2005, "Commodities: A Case for Active Management," Journal of Alternative Investments, Fall, pp. 8–29.

2 Akey, R., 2007, "Alpha, Beta, and Commodities: Can a Commodities Investment be Both a High- Risk-Adjusted Return Source and a Portfolio Hedge?", a chapter in Intelligent Commodity Investing (Edited by H. Till and J. Eagleeye), London: Risk Books, pp. 377-417; and in Journal of Wealth Management, Fall 2006, pp. 63–82.

3 Akey, R., H. Till, and A. Kins, 2006, "Natural Resources Fund of Funds: Active Management, Risk Management, and Due Diligence," a chapter in Funds of Hedge Funds (Edited by G.Gregoriou), Oxford: Elsevier Finance, pp. 383-399.

3 Carpenter, C. and M. Munshi, 2008, "Commodity Prices Head for Biggest Weekly Decline Since 1956," Bloomberg News, March 2

4 Christory, C., S. Daul, and J.R. Giraud, 2006, "Quantification of Hedge Fund Default Risk," Journal of Alternative Investments, Fall, pp. 71-86.

5 Commodity Futures Trading Commission, 2007c, "Former BP Trader Agrees to Pay $400,000 Civil Penalty to Settle U.S. Commodity Futures Trading Commission Charges of Attempted Manipulation of the NYMEX Unleaded Gasoline Futures Contract," Release 5402-07, October 25.

6 Cootner, P., 1967, "Speculation and Hedging." Food Research Institute Studies, Supplement, 7, pp. 64-105.

7 Eagleeye, J., 2007, "Risk Management, Strategy Development, and Portfolio Construction in a

8 Commodity Futures Programme," a chapter in Intelligent Commodity Investing (Edited by H. Till and J. Eagleeye), London: Risk Books, pp. 491-497.

www.google.com

Times of India

Free press