



Dodd-Frank as a Catalyst to Improve Energy Firms' Risk Management

By Mayra Rodríguez Valladares

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Energy companies have been giving increasing attention to Dodd-Frank reporting requirements. Time and again, however, companies react to new laws or crises with minimum resources and usually target only compliance or data and information technology requirements.

What energy companies should really do is use this opportunity to focus significantly on revamping how they define and undertake risk management. Unfairly or not, energy companies, like other U.S. businesses, continue to be impacted significantly by the 2008 financial crisis.

As banks undergo major changes to risk management and derivatives strategies amid stricter financial regulations under Dodd-Frank and Basel III, energy companies will likely increase use of futures, joining the "futurization" trend - that is, the usage of standardized swaps, in order to minimize credit and operational risks.

RISK MANAGEMENT: ITERATIVE AND DYNAMIC

A wide array of energy companies, from small, family-owned operations to multinational oil and gas "majors," are being affected by the Wall Street Reform and Consumer Protection Act, also known as Dodd-Frank. Corporate management needs to view new laws and regulations and downturns in the economic cycle as a regular part of life, not as occasional events.

As the regulatory structure shifts, energy companies are discovering that banks' new capital, collateral, and margin requirements are very much defining their relationship to their clients and derivatives counterparties.

Even if energy companies want to transact derivatives with less-regulated shadow financial institutions, which in the U.S. represent about 35% of total financial institutions, the Financial Stability Board¹ and pro-financial reform bodies are gearing up for 2013 as a year to regulate non-bank financial institutions.

MACRO RISKS

Essentially, energy companies are exposed significantly to two broad sets of risk: macro and financial. Macro risks are divided into country and economic sub-categories, which in turn impact financial risks enormously.

Elements of country risk lie in several areas, including the stability of political systems and the ability and willingness to pay back financial obligations, also known as sovereign risk. Other sticky wickets include legal enforcement and regulations, expropriation, arbitrary exchange controls, internal and external strife, and corruption.

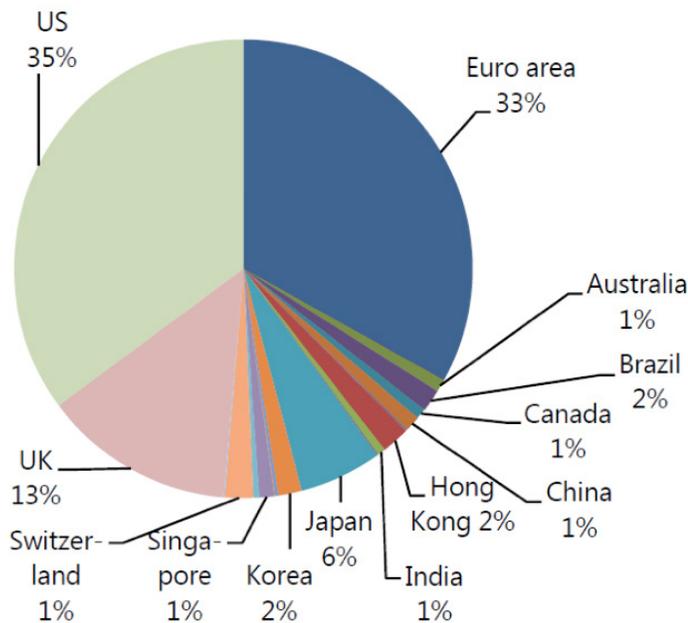
Energy companies, especially those with global activities, have usually had a good eye on sovereign risk, expropriation and arbitrary exchange controls. Now, however, they really need to understand how financial regulations in the U.S., Europe and, to a lesser extent, in other parts of the globe could affect how financial institutions interact with them when it comes to extending loans or approving derivatives transactions.

Under economic risks, energy companies are affected by fiscal and monetary policies undertaken by a country's corresponding authorities. For U.S.-based companies, this includes the looming "fiscal cliff" on the home front, which could have a dampening effect on the economy and energy demand.

FINANCIAL RISKS

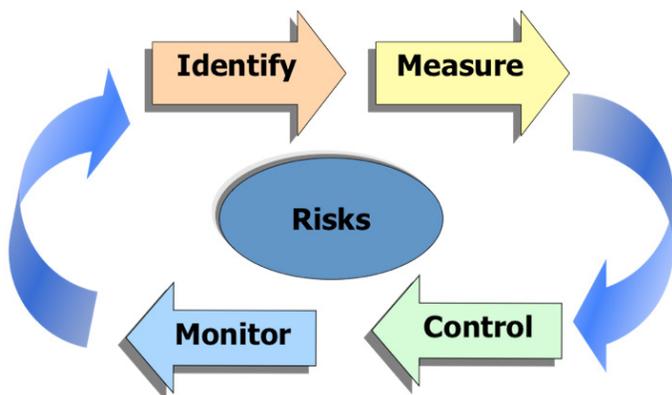
Among financial risks, credit availability, market fluctuations and legal and liquidity matters are ongoing concerns. Any one of these could have adverse effects and pose significant reputation risk. The first set of financial risks energy company management need to think about is credit risk, both in counterparty quality and in concentration. Energy companies could really benefit from having more sophisticated tools to assess this risk.

At end-2011

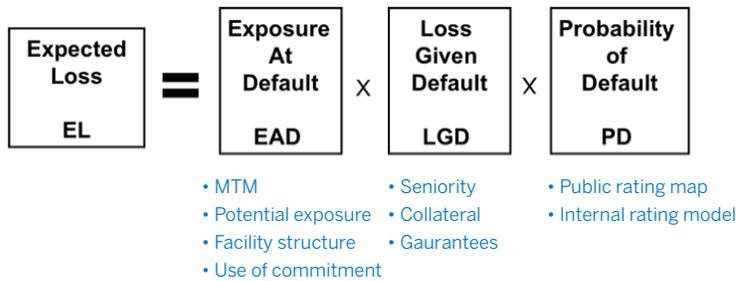


Source: Global Shadow Banking Monitoring Report 2012, 18 November 2012, Financial Stability Board.

Irrespective of when some outstanding Dodd-Frank rules are finalized, energy companies need to think seriously about significant changes in their risk management - that is how they define, identify, measure, control, and monitor macro and financial risks. Risk management is iterative and dynamic, not something senior managers should just deal with starting January 1, when a new law is passed, or when a crisis comes along.



Energy companies have many different types of counterparties, including buyers of their products and services as well as financial institutions through which they trade derivatives. Senior managers need to develop robust internal ratings-based approaches where they can calculate expected loss with any on- or off-balance sheet exposure with counterparties.



It is very subjective and challenging to arrive at an expected loss estimate, considering how default probabilities are typically determined. Most credit risk managers use external ratings from Fitch, Moody's, and Standard and Poor's, despite the rating agencies' conflict of interest, in that they are paid by the issuers.

Also, because rating agencies try to be careful before issuing a rating, they can be very slow to downgrade or upgrade. By the time a rating action is taken, an entire portfolio can move significantly, as evidenced during the 2008-09 financial crisis, when portfolio values were plunging, irrespective of rating speed. Hence, energy company managers need to use counterparty financial information. If that counterparty is a publicly-traded company, share and bond prices and credit spreads can be incorporated as part of an internal ratings based system.

Arriving at expected loss helps company managers with pricing and asset allocations. Thereafter, expected loss is used in conjunction with credit risk measurement models, such as Credit Value-at-Risk (CVaR) to arrive at a cushion for unexpected losses arising from credit risk.

If an energy company uses futures or clearable standardized swaps, its expected loss, and hence its unexpected loss, decreases, enabling it to set aside less capital for credit risk. Yet, senior managers need to be very attentive to the creditworthiness of the exchanges and of any type of Derivatives Clearing Organizations (DCOs), since with exchange-traded or clearable products, they are the counterparties not banks or other financial institutions.

OPERATIONAL RISKS

Operational risks include breaches in normal day-to-day business activities due to failures caused by people, processes, systems/technology and external factors. With Dodd-Frank, however, energy companies need to apply this definition of operational risk to their financial transactions such as lines of credit, corporate loans, and financial and commodity derivatives. Senior managers must insure they have broadly-defined operational risk to be able to identify, measure, control and monitor it across every division and at every different legal jurisdiction.

If energy companies use economic capital models to calculate unexpected losses arising from operational risk, what types of derivatives they transact will impact their operational risk charge. In contrast with going through an exchange, where it is the exchange's responsibility through a DCO to take care of all the back office derivatives functions, when energy companies use OTC derivatives they bear direct responsibility for operational risk with a bilateral counterparty.

Again, here is a risk category where using futures and standardized derivatives can help energy companies to lower their operational risk charge. However, unlike with OTC derivatives, they must always have margin ready for the exchange.

LIQUIDITY RISKS

Liquidity risk has two subcomponents, a party's ability to make payments when due and a party's ability to buy or sell a security or derivative at a reasonable market price when it wants to.

While not all types of energy futures are available on exchanges yet, leaving energy companies exposed to basis risk or influencing them to go to OTC derivatives, this is slowly changing amid increasing types of standardized swaps.

Hence, by using futures and standardized swaps, energy companies minimize the risk they may not be able to get into or out of a derivatives position when they want, unlike in the OTC derivatives market, which is much less liquid and likely to be increasingly less liquid as "futuresization" continues.

LEGAL RISKS

Companies can also suffer damage from problems in documentation and compliance. Since the 1990s, International Swaps and Derivatives Association documentation, such as the Master Agreement and a host of confirmation, netting, protocols and support annexes have facilitated global derivatives trading.

Yet, when any problem arises, again there is no intermediary available, and the responsibility to solve problems falls to the two derivatives parties. In an exchange, a lot of documentation responsibility is with the DCO.

Compliance issues can arise with both exchange-traded and OTC derivatives. Because credit, liquidity, and operational risks are higher with OTC derivatives than with futures or standardized derivatives, compliance departments have more responsibilities to make sure staff understands the products. Additionally, senior

management must properly communicate to all levels the rules and regulations surrounding the instruments. Reporting responsibilities to regulators are higher with OTC derivatives.

Lastly, and no less important, there are market risks - the possibility that commodity price and interest rate movements and volatility can impact a company adversely. That kind of risk is always there for both exchange-traded and OTC derivatives. However, better transparency in futures and standardized derivatives can help energy company managers make informed decisions on trading strategy.

ENERGY COMPANIES' PREPARATION FOR DODD-FRANK

If the reaction to Dodd-Frank from energy companies is representative of other sectors, then corporations, and investors in them, should be concerned.

A recent Platts survey of nearly 50 energy companies indicated the industry hasn't spent much money to comply with Dodd-Frank. According to the survey, over 25% of respondents said that they have budgeted nothing to comply with new reporting and record-keeping rules the Commodity Futures Trading Commission plans to have in place in early 2013.

Many of the firms with no budget are producers or utilities that believe they will be classified as end-users under the CFTC's derivatives regulatory regime and thus not subject to costly rules swap dealers and other swap participants are expected to face, the survey found.

It is important for companies to realize that not only does Dodd-Frank require that they at the very least have some reporting and record-keeping requirements, even if they are not a swap dealer, but also that new Basel III global standards will continue to influence big banks' focus on capital efficiency, and hence derivatives trading strategies.

There is no doubt that understanding and even just keeping up with all the information surrounding Dodd-Frank, Basel III, and other regulatory frameworks is daunting. Yet energy companies and the American economy will be much better served if energy companies use this time to upgrade what risk management means at every level of their companies.

New regulations always come and some will ultimately change, but what should not change is the desire of corporate boards and senior managers to make their firms profitable and financially healthy.

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REFERENCES

“Global Shadow Banking Monitoring Report 2012,” Financial Stability Board, *November 18, 2012*.

“Most Energy Firms Have Spent Nothing to comply with Dodd-Frank,” Platts, *October 2012*.

“Futures and Futurization: Full Steam Ahead on Dodd-Frank,” Mayra Rodríguez Valladares, CME Group, *November 19, 2012*.

¹ Headquartered at The Bank for International Settlements