Notional value under Dodd-Frank:
survey of energy commodities participants
The Dodd-Frank Act and notional value

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), signed into law on July 21, 2010, was designed to reform financial regulations to improve transparency and reduce systemic risk. Title VII of the Act establishes a regulatory framework governing derivatives traded over the counter, which has implications for commodities markets participants who use these instruments.

A number of key tests under the Act – relating to whether an entity would be designated as a Swap Dealer (SD) and Major Swap Participant (MSP) – are based on the notional value of a company’s executed swaps transactions. However, the US Commodity Futures Trading Commission (CFTC or the Commission), which was tasked with Title VII rulemaking, has not prescribed specific methods in calculating notional value. Instead, the Commission has asked companies to follow “industry standard practices.”

While the term notional value is commonly used in industry, in practice there isn’t a single accepted definition. In order to discern how market participants are addressing this issue, in January 2013 Ernst & Young distributed a survey to a number of companies that engage in commodity swaps and other derivatives activities. The survey asked companies how they are performing the required notional value calculations for a variety of instrument types for tests under the SD and MSP designations. We present the survey results and analysis below.

---

1 These terms of the meaning defined under Section 1.3(bsp) and (iii) of the CFTC rules, whereby entities whose commodities trading activity exceeds a certain level are subject to enhanced oversight under the Act and must register as a Swap Dealer (SD) or Major Swap Participant (MSP) with the CFTC, in addition to a number of other requirements under the Dodd-Frank Act.

Key survey results

We received survey responses from a broad range of companies that trade multiple energy commodities. A total of 16 companies completed the survey, including seven utilities and independent power producers (IPPs), three integrated oil and gas companies, two independent oil and gas companies and one midstream oil and gas company. Three respondents did not disclose their demographic information. The respondents indicated that they use derivative instruments across a number of energy and energy-related commodities, including natural gas, electric power, crude oil and refined products, natural gas liquids, coal, ethanol, liquefied natural gas, metals and cross-commodity instruments.

Survey participants were asked a series of questions relating to how they define notional value in their calculations; in particular:

1. Whether they are applying the same calculation conventions for determining notional value for the Swap Dealer de minimis exception and for the calculation of notional value under the Major Swap Participant tests

2. Whether they relied on the proposed definition of notional value in a comment letter, dated September 20, 2012, to the CFTC from energy industry groups

3. Whether they relied on the examples provided in the CFTC's Large Trader Reporting Guidebook for Physical Commodity Swaps (LTR)

Most of the companies (87%) surveyed use the same calculation convention of notional value for both the SD and MSP designations. However, 13% of the companies are using two separate conventions.

Almost all respondent companies (94%) fully or somewhat relied on the definition of notional value in the September 20, 2012, Comment Letter to the CFTC from energy industry associations.

Only a little over half of the companies relied on (fully or somewhat) the CFTC’s Large Trader Reporting Guidebook (LTR), with some commenting that the guidebook may not reflect “industry practice” in all circumstances; five companies noted that they relied more on the September 20, 2012, Comment Letter and/or external counsel guidance over the LTR.

One respondent cited a lack of concrete guidance from the CFTC (and the Commission’s lack of response to the September 20 Comment Letter) as an obstacle to compliance; another respondent noted that existing CFTC guidance (including the FAQ and LTR) may not be consistent with industry practice; three more respondents noted that they would change the calculation methodology if more guidance were provided.

There is diversity in practice of notional value calculations across the surveyed companies.

---

3 The signatories of the September 20, 2012, Comment Letter include the American Petroleum Institute, Commodity Markets Council, Edison Electric Institute, Electric Power Supply Association, Independent Petroleum Association of America and Natural Gas Supply Association. The Comment Letter sought to provide a view, albeit at a high level, of how notional value should be calculated across a number of commodity swaps and options.
Question 1: Is your firm applying the same calculation conventions for determining notional value for the Swap Dealer *de minimis* exception as you are for the calculation of notional value under the Major Swap Participant tests?

Most of the companies surveyed (87%) use the same calculation convention of notional value for both the SD and MSP designations. However, 13% of the companies are using two separate conventions, noting that they believe the *de minimis* calculation for SD should use the notional value at the time of the transaction, and that the calculation for MSP should be based on the notional value of a position at points in time, calculated using current prices.

Question 2: Has your firm relied on the proposed definition of notional value as set forth in the industry Comment Letter dated September 20, 2012?

Almost all respondent companies (94%) fully or somewhat relied on the definition of notional value proposed in the September 20, 2012, Comment Letter to the CFTC. Two respondents cited that they have relied on the advice of outside legal counsel in addition to the Comment Letter. One respondent who did not fully rely on the Comment Letter commented that they considered the practice of using option premiums in calculating the notional value to be conceptually inconsistent with the calculation for fixed-for-floating swaps.
Question 3: In your calculation of notional value for the Swap Dealer de minimis exception and Major Swap Participant calculations, has your firm relied on the examples provided in the CFTC's *Large Trader Reporting Guidebook for Physical Commodity Swaps*?

Only a little more than half of the companies relied on (fully or somewhat) the CFTC's LTR, with one respondent commenting that the Guidebook may not reflect “industry practice” in all circumstances. Specifically, five companies noted that they relied more on the September 20, 2012, Comment Letter and/or external counsel guidance over the LTR.\(^4\)

Separately, when asked about how to calculate the notional value in cases where the pricing is illiquid or not observable, fewer than half (47%) of the respondents suggested that best approximations of the price are used, with a smaller contingent (33%) noting that they would substitute visible pricing where appropriate. Companies that responded “Other” have cited that they utilize only transaction prices in the notional calculation (and therefore do not rely on price curves).

---

\(^4\) Separately, according to the February 21, 2013, No-Action Relief request to the CFTC's Division of Swap Dealer and Intermediary Oversight (DSIO) from the Natural Gas Supply Association and the Electric Power Supply Association, Commission staff have informally expressed that the LTR is for Part 20 reporting purposes only and should not be relied upon as firm guidance on SD and MSP calculations. Source: *Energy Users Ask CFTC to Grant 'No-Action' Relief for Notional Amount Methodology*, Natural Gas Supply Association, 21 February 2013.
Question 4: For instances where your firm’s calculation of notional value depends upon illiquid, non-transparent price curves (e.g., balance of month, day of week-type settlements), how is your firm approaching marking price curves for the calculation of notional value?

- Use best approximations of the non-transparent price curves (47%)
- Where pricing is visible for one leg of swap, but not the other leg, use visible pricing (33%)
- Other (20%)
Detailed survey responses – Swap Dealer *de minimis* calculation by instrument type

In the following section, survey respondents were asked to provide instrument-specific notional value calculations for the Swap Dealer *de minimis* test.

Note: Responses are the product of the choice of notional quantity (left column) multiplied by the choice of Notional Price (top row). Please note that an absolute value of the product is implied throughout.

**Question 5. Fixed-for-float swaps (SD *de minimis*)**

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed price leg</th>
<th>Floating price leg</th>
<th>Other</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>63%</td>
<td>19%</td>
<td>6%</td>
<td>13%</td>
</tr>
</tbody>
</table>

About two-thirds of respondents (63%) chose the price of the fixed leg as the basis in calculating notional value (i.e., notional quantity multiplied by the fixed price). This approach appears to be consistent with the one suggested by the September 20, 2012, Comment Letter.

**Question 6. Basis swaps (SD *de minimis*): exchange of a fixed-basis differential for floating-basis differential**

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed basis differential</th>
<th>Floating basis differential</th>
<th>Fixed minus floating basis differential</th>
<th>Other</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>50%</td>
<td>13%</td>
<td>13%</td>
<td>6%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Half of the respondents (50%) selected the fixed-basis differential as the price in calculating notional value. (As an illustration, if Party A contracts to pay $0.10/MMBtu and Party B pays Houston Ship Channel minus LD NYMEX, the fixed basis differential is the $0.10). Two respondents (13%) noted that they use the difference between the fixed and floating differentials, while the respondent who selected "Other" uses the basis differential at the time of execution. No respondent selected the whole price of either leg (as opposed to just the differential) in the calculation of notional value.
Question 7. Index swaps (SD de minimis): exchange of a fixed-price differential for the difference between two floating indices (e.g., between first-of-month and gas daily)

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed price differential</th>
<th>Index A</th>
<th>Index B</th>
<th>Floating price differential (Index A - Index B)</th>
<th>Other</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>44%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>13%</td>
<td>25%</td>
</tr>
</tbody>
</table>

A plurality of respondents (44%) are using the fixed-price differential in calculating notional value, which is consistent with the Comment Letter. However, two respondents chose whole prices (i.e., the whole price for Index A or Index B). One respondent who selected “Other” used the basis differential at the time of execution, while another used the difference between the fixed and floating differentials.

Question 8. Float-for-float swap (SD de minimis): exchange of one floating price for another floating price with a fixed price differential (e.g., floating price #1 for floating price #2 +/- Diff)

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Floating price #1 - (floating price #2 +/- fixed differential)</th>
<th>Floating price #1</th>
<th>Floating price #2 +/- fixed differential</th>
<th>Other</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>44%</td>
<td>6%</td>
<td>6%</td>
<td>13%</td>
<td>31%</td>
</tr>
</tbody>
</table>

A plurality of respondents (44%) indicated that they calculate notional value using the difference between the two floating prices plus the fixed differential. Of those who answered “Other,” one respondent uses the fixed differential only, and the other uses the straight difference between the two floating legs (without the differential). Almost one-third (31%) of respondents indicated that they were not certain as to the correct calculation of notional value in this case.

Question 9. Long fixed-strike call option (SD de minimis)

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed premium (i.e., paid or received)</th>
<th>Current market premium</th>
<th>Floating price (of underlying)</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>50%</td>
<td>13%</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>Delta-adjusted quantity</td>
<td></td>
<td></td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>
Question 10. Short fixed-strike call option (SD _de minimis_)

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed premium (i.e., paid or received)</th>
<th>Current market premium</th>
<th>Floating price (of underlying)</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>50%</td>
<td>13%</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>Delta-adjusted quantity</td>
<td></td>
<td></td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

With respect to both long and short commodity options, half of the respondents (50%) calculated the notional value using the contracted notional quantity multiplied by the paid/received premium. This approach is consistent with the industry Comment Letter, but is not the same as the method indicated in the LTR (which asks those reporting data to use delta-adjusted quantity times underlying price). Two respondents indicated that they calculate the notional value using delta-adjusted quantity and the floating price of the underlying, while two more noted that they utilize the current market premium and contracted quantity.

Question 11. Long commodity spread option (e.g., heat rate) for SD _de minimis_

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed premium (i.e., paid or received)</th>
<th>Current market premium</th>
<th>Floating price (of underlying)</th>
<th>Other</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>38%</td>
<td>6%</td>
<td></td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Delta-adjusted quantity</td>
<td></td>
<td></td>
<td>6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 12. Short commodity spread option (e.g., heat rate) for SD _de minimis_

<table>
<thead>
<tr>
<th>Multiplied by</th>
<th>Fixed premium (i.e., paid or received)</th>
<th>Current market premium</th>
<th>Floating price (of underlying)</th>
<th>Other</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional quantity</td>
<td>38%</td>
<td>6%</td>
<td></td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Delta-adjusted quantity</td>
<td></td>
<td></td>
<td>6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For both long and short commodity spread options, a plurality of respondents (38%) calculated the notional value using the notional quantity (without adjusting for delta) multiplied by the paid/received premium. This approach is consistent with the approach to options in general laid out in the industry Comment Letter, although spread options were not specifically discussed. One respondent who answered “Other” noted that they calculate the notional value by taking the difference between the delta-adjusted quantity multiplied by the floating price of the first leg and the delta-adjusted quantity times the floating price of the second leg.
How do responses for MSP differ from the SD de minimis calculations?

In general, the responses are largely consistent among those surveyed between the de minimis test for SD and the MSP tests (which is expected, given that 87% of the respondents had indicated that they use the same convention for both). Some of the salient items that emerged from the responses relate to more general, methodological issues, such as the following:

1. Two respondents noted that they use the price at the time of transaction for the purpose of calculating the SD de minimis test, and that current prices are used in the MSP tests.

2. Slightly more respondents chose “Current market premium” instead of the premium that was paid/received when calculating the notional value for options.

We did not note additional significant differences except for those outlined here.
Conclusion

There continues to be uncertainty in the application of notional value under current CFTC guidance. As highlighted by the results of our survey, energy commodity participants are using a number of approaches to calculate notional value – which supports the idea that the industry lacks an agreed-upon definition of the term.

Indeed, of the respondents to our survey, half (50%) have indicated that they are contemplating or discussing changes to their methodology. One respondent cited the lack of concrete guidance from the CFTC (and the Commission’s lack of response to the September 20 Comment Letter) as an obstacle to compliance; another respondent noted that existing CFTC guidance (including the FAQ and LTR) may not be consistent with industry practice, and three more respondents noted that they would change the calculation methodology if more guidance was provided.

Despite continued uncertainty over the methodology for calculating notional value, we ask that energy market participants consider the following key principles when adopting a specific calculation convention for notional value:

- Establish a consistent, firm-wide approach to implementing a specific methodology to promote transparency and reduce application inconsistencies
- Have an appropriate level of documentation in place to support calculation procedures as well as the firm’s rationale for utilizing the chosen methodology
- Ensure a sufficient oversight and control structure exists to foster execution and accountability of the firm’s calculation convention

Though “industry standard practices” for calculating the notional amount of swaps may become more certain in the future, applying a clear and well-documented approach (includes any potential assumptions made) for executing the firm’s notional calculation remains critical for a consistent and effective response to compliance mandates brought forth by The Dodd-Frank Act.
How Ernst & Young can help

Ernst & Young LLP’s Energy Financial Accounting Advisory Services practice includes a dedicated team focused on Title VII compliance for swaps dealers and commercial end users. Our professionals have deep knowledge of Title VII’s provisions and are deeply versed in leading practices for Title VII compliance programs across the energy industry. We have a solid track record working with a wide range of energy companies on assessing the impacts of and implementing Title VII. We can customize our services to suit an organization’s specific circumstances, as follows:

- **Training suite** – Two distinct modules to educate treasury departments and boards of directors on the regulations and potential impacts.
- **Compliance toolkit** – A package of training, documentation templates and hands-on assistance from our professionals.
- **Readiness assessment** – An analysis of the potential gaps between your company’s compliance preparations thus far and the applicable new requirements.
- **Assessment and compliance plan** – A comprehensive Title VII readiness assessment and implementation, with assistance from our professionals throughout the project, including assessing Title VII’s impact, reviewing your hedging portfolio, helping you establish which trading entity designation is applicable to relevant business units, and helping you classify derivatives contracts.
  - Advising on the changes that must be made to processes, infrastructure, and systems to achieve compliance and adapt to the evolving derivatives market
  - Reviewing alternative systems and platforms for executing and capturing trades, modeling and risk management
  - Documenting functional and reporting requirements to determine which technology changes may be needed
  - Recommending appropriate implementation plans and a project road map in line with expected mandates for compliance
  - Helping educate the board of directors regarding their accountability for reviewing and approving management’s decision to enter into non-cleared swaps
  - Providing an in-depth analysis of your organization’s systems, policies, processes, risk models and controls as impacted by Title VII regulatory changes, and working alongside you to design and implement necessary improvements

Learn more

To learn more about our experience advising global, national and local oil and gas companies, please contact one of the following Ernst & Young LLP Oil & Gas professionals.

Suzie Kupiec  
+1 713 750 8214  
suzanne.kupiec@ey.com

Tom Lord  
+1 713 750 5289  
tom.lord@ey.com

Craig Nifong  
+1 713 750 1233  
craig.nifong@ey.com

Abdullah Khan  
+1 713 750 8155  
abdullah.khan@ey.com

Johnny Molina  
+1 713 750 1367  
johnny.molina@ey.com

You can also connect with us using social media: