Overbidding in the Indian Licensing Rounds: Case of Winner's Curse?
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Summary
Normally, after a bidding round for E&P blocks is over, an analysis is attempted to see the difference between the highest bidder, who normally wins the bid and the second highest bidder in monetary terms. This difference is known in the international industry as the “Money-left-on-the-table”. The analysis is done by the E&P Companies with the objective to reduce it over the time so that this additional money can be utilized to either bid for more blocks or to carry out more intensive exploration in other sector. Sometimes, Companies commit so much money in overbidding the block that it might not achieve its corporate goal. Such a situation is called “Winner’s Curse”. In this paper an analysis has been carried out by selectively taking out examples from a few NELP bidding rounds to drive the point that in spite of many a round of offer under NELP, the industry still continues to overbid.

Introduction
Exploration blocks are offered globally through an offer wherein an E&P Company, desirous to invest need to go through a tendering process. Normally, the Company has to commit a fixed exploration programme in terms of 2D and/or 3D seismic surveys and drilling of exploratory wells. In some countries, the commitment is not in terms of physical inputs; rather, a company has to commit a certain amount of money that it intends to spend during exploration. This is one of the main criteria on which the Host Government decides whom to award the block; because ultimately, the Host Government wants more exploratory input in the acreage on offer.

Once an E&P Company decides to bid for a certain block or a number of blocks after the techno-economic evaluation of the block, the company goes whole hog to win it. In this endeavor, more often than not, the company ends up in committing much more exploratory input or financial commitment than what was necessary to win the block. However, this can be known only when the bids are opened and the winning Company is in a position to know how much it has bid more in terms of money than the second highest bidder.

Let us take an example. Suppose the Winning Company A has bid with a committed Work Programme of 2000 LKM of 2D seismic API, 1000 Sq. Km of 3D seismic API and drilling of five exploratory wells. On bid opening it is found that the second highest bidder Company B had only committed 500 LKM of 2D seismic API and 1 exploratory well. This is a situation where Company A need not have gone so high in committing an investment much higher than Company B to win the block. This also means that there was some flaw in evaluating the merit of the block, which perhaps resulted in overbidding. When a Company wins blocks by hugely overbidding, the situation is often called “Winner’s Curse”.

To avoid such scenario, it is often advisable to carry out a post bid analysis in order to know how much extra money has been committed by a Company due to overbidding. The difference between the winner and the second highest bidder in monetary terms is called the “Money-left-on-the-table”. This is the extra money which has been unnecessarily committed to carry out exploration in the said block which would otherwise been available to the Company for more prudent use.

Method
An attempt has been made in this paper to study the bidding pattern of an NOC with respect to other E&P companies in selected NELP rounds. Since in NELP the work programme commitment is in terms of exploratory inputs only, the committed inputs by all the companies have been converted to monetary value by using the unit cost of surveys and wells of that period.

Examples
NELP-I

The NELP was introduced in India in 1997 and the first round of offer came in 1999 when Government of India offered 48 blocks for E&P Companies to bid and win. Prior to the introduction of NELP, the exploration in the Indian sedimentary basins were largely being carried out by the two National Oil Companies (NOCs), only.

Considering the fact that great uncertainties exist in defining the geological parameters in a given exploration block, the data availability is of paramount importance. The G&G data plays a fundamental role in defining the prospectivity which in turn becomes a deciding factor for bidding.

When the data is available in equal respect to all the bidding companies, it is called a state of data symmetry. However, in certain cases some companies may have more information by virtue of exploring in the basin in the past or exploring in the contiguous area to the one on offer.
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These Companies are often termed as “neighbour Companies”. These companies are at an advantage and are likely to carry out a more accurate evaluation of the block than the other companies. As a result, these companies are likely to bid more prudently in accordance to the prospectivity of the block in order to avoid “winner’s Curse”.

On the contrary, if the block or the sector is considered highly prospective, non-neighbor companies may like to a high price in order to get a foothold in the sector. This is often done in order to reduce risk in the future rounds of offer.

Let us now examine the scenario when in NELP-I round the blocks came on offer on a level playing ground for the first time in India. At that time, the most prolific basin was the Mumbai Offshore. In the blocks that were on offer in Mumbai Offshore shallow water, the major new entrant in the E&P sector in India bid very high when compared to the NOC which was exploring this basin so far. This can be seen in the figure 1 below. Average commitment of Company A was around US$ 39 million in a block while that of the NOC was of the order of US$ 10 million.

The deep-water blocks also came on offer for the first time under this round. Here the scenario was very interesting. While the Company A was very upbeat and bid with high commitments, the NOC was surprisingly not ready to take any risk. While the average per block commitment for Company A was around 22 US$ million, NOC restrained itself with average per block offer of US$ 1 million only as can be seen in figure 2.

As a result, in the blocks, which were highly considered prospective Company A was way ahead of the NOC and won them hands down. But in that process it ended up committing much more than was perhaps required for it to commit for winning these blocks.

Figure 1: Comparison of bidding amount in Mumbai Offshore shallow water between the winning company and the second highest bidder.

It can be noticed that on an average the overbidding by Company A was to the tune of US$ 20 million in each block.

NELP-II

This round saw the reversal of fortunes. The NOC failing to win many of the desired blocks in the first round tried to match Company A. The difference in average commitment by the NOC in various sector from the first round clearly brings out the conclusion that this overbidding was more to win the blocks from its competitor Company A rather than based on the prospectivity of the blocks alone.

The Kerala Konkan deep water sector was opened up for the first time in this round which was not explored earlier by any company, though the NOC had experience of Kerala-Konkan shallow water. So as far as data availability was concerned, a case of data symmetry existed. However, the NOC with an intention of winning the blocks ended up with an average commitment of US$ 10 million per block compared with Company A’s US$ 0.5 million offer.
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Most significantly, the average commitment of the NOC for deep water blocks in this round went as high as US$ 30 million compared to an average commitment of only US$ 1 million in the first round. Not only that it far exceeded the average bidding amount per deep water block by Company A in the first round.

Winner’s Curse

Let us now take an example of Winner’s curse. During the seventh round of NELP, Bengal onland Basin was once again opened up for exploration. Four exploration blocks were on offer. Bengal onland basin has earlier been explored by NOC as well as MNCs and has an enigma for the explorationist. When these blocks came on offer, lot of interest was seen among potential bidders as many Companies visited the data room and purchased data package. This created hype about these blocks. The NOC which has earlier explored the Basin bid for these blocks anticipating much competition from other Companies. For the three blocks it submitted bid, it ended up committing exploratory inputs ranging from US$ 23 million to US$ 48 million. While there was a competition in only one block, in the other two blocks there was no competition. This, although the NOC won all the three blocks, its expenditure commitment in the blocks were very high which, post bid appeared as unnecessary. This was a clear case of winner’s curse, where in spite of being in knowledge of the basin, the Company ended up with overbidding.

Conclusion

Each E&P Company, however big or small should carry out a post bid analysis after the conclusion of each round and estimate the extent of overbidding. This needs to be further examined in the light of prospectivity of the block concerned. By carefully analyzing the bids, each company should frame a strategy that suits it the best considering its stature and priorities.

References

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