

VENEZUELAN THIRD ROUND REVISITED EIGHT YEARS LATER: LESSONS IN COMPETITIVE BIDDING

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RESUMEN

La Tercera Ronda de Acuerdos de Servicios Operacionales fue el último paso en el proceso de “Apertura” de la industria petrolera en Venezuela, que comenzó en 1992. El objetivo de esta licitación fue el de incrementar la producción diaria de 3 MMbpd a 6 MMbpd en los siguientes 10 años. 20 bloques de producción incremental fueron ofrecidos en 1997 durante este evento, los cuales recibieron un total de 132 ofertas de 130 compañías internacionales y 70 venezolanas. El total de bonos ofrecidos sumaron US\$ 2170 MM por 18 áreas que recibieron ofertas.

La Tercera Ronda contribuyó a incrementar la producción de Venezuela en aproximadamente 232,000 bpepd. Si bien esta figura es importante, resulta modesta en comparación a las expectativas en 1997. Varias compañías se benefician por la producción que se realiza en este momento como resultado de esta ronda de licitación, pero se estima que la mayoría de ellas perdió valor cuando se considera el ciclo completo del negocio. Los operadores venezolanos han sido particularmente afectados. Las ofertas ganadoras de los operadores venezolanos fueron muy consistentes y estuvieron posiblemente basados en el valor asignado al petróleo remanente *in situ*, con valores muy similares a los publicados por PDVSA en la oferta inicial. El proceso ayudo a desarrollar a algunos operadores locales, pero con excepciones menores, no ha generado una industria local similar a la que se originó en los 80 en la Argentina.

INTRODUCTION

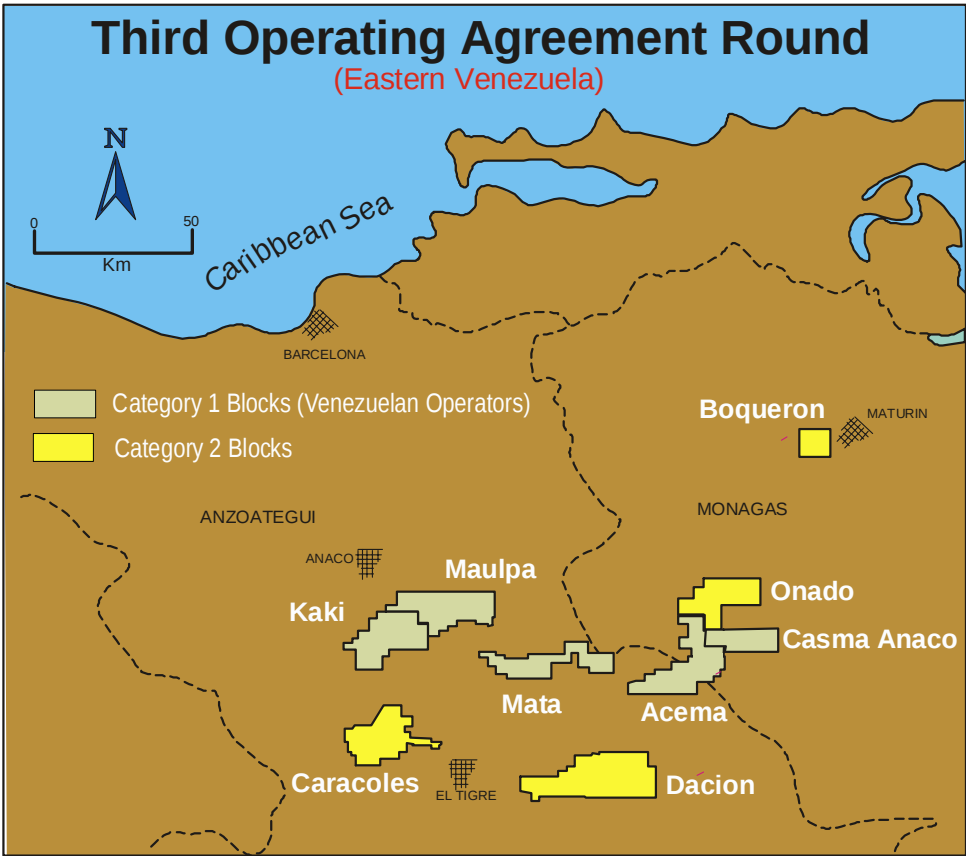
June 2nd 1997, in the grand room of the Tamanaco Hotel in Caracas over 1000 persons faced a larger than life television screen. A transparent empty acrylic box is next to a table with officials ready to initiate the public offering of 20 blocks with an aggregate estimated remaining reserves of over 2 billion Stbo (Figs.1,2). Representatives from 130 international companies and 70 Venezuelan companies were nervously awaiting the opening of the bidding event. At the end of the week, when the adrenaline subsided, the Venezuelan government celebrated the offering that left 2.17 Billion dollars that companies were eager to pay in order to participate in the feast. This was the mayor opening of the Venezuelan industry after its nationalization in 1976.

The Third Round was the latest step in the Venezuela “Apertura” process that started in 1992 with the aim to reactivate the oil industry and bring fresh risk capitals to the country. During the beginning of the 90’s, PDVSA needed vast amounts of money in order to accomplish its expansion plans, but the international banks were not very keen on lending the money. Additionally, the company faced a cut in the budget for its 5 years investments plan from US\$ 51 billion to almost US\$ 40 billion (Kielmas, 1994) so a strategy was designed to bring back to the country foreign investments as well as to attract local private capitals to help the ambitious PDVSA plans. In this respect, the objective of the Third Round was to help increase the at that time daily production of 3 MMbopd to 6 MMbopd over the following 10 years with the aid of private capitals.

Figure 1- Location of Third Round Blocks in Western Venezuela



Figure 2- Location of Third Round Blocks in Eastern Venezuela

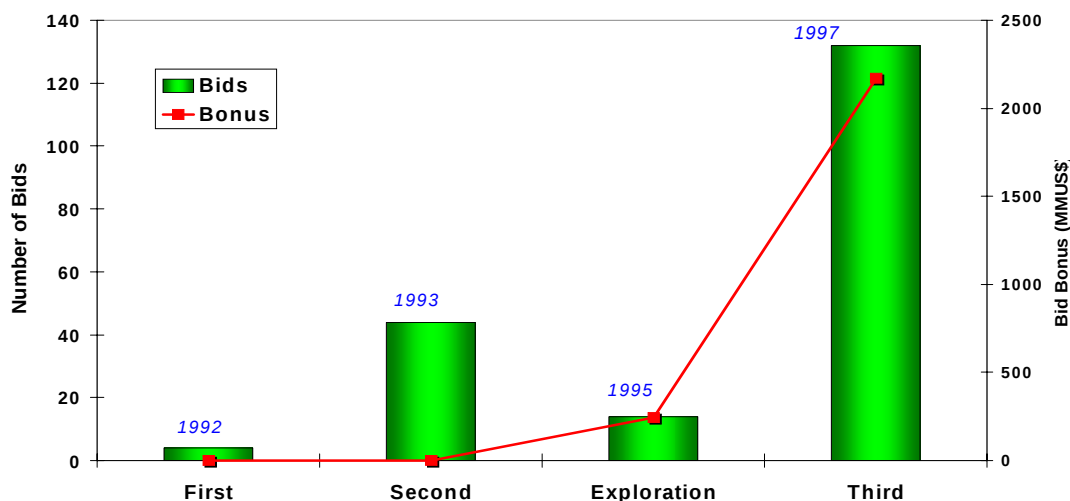


Despite the early excitement, eight years later the Third Round has materialized only some of the benefits expected either by the government or the private companies. This major event in the industry yields many valuable lessons that we would like to analyze.

THE THIRD ROUND IN THE PERSPECTIVE OF THE VENEZUELAN “APERTURA”

The Venezuelan Third Round was the mayor opening of the venezuelan industry after its nationalization in 1976. However two previous rounds of marginal fields, and one of exploratory blocks were offered during the nineties as a strategy to attract again the foreign oil industry into the country. The industry responded cautiously at first, and during the first round of Operation Service Agreements of 1992 only four consortia ventured into new territory with only two contracts being signed (Fig. 3). The early success of this event attracted more companies during 1993 when 44 bids were placed for 13 areas offered in the second Operation Service Agreement offering. This resulted in the signature of 11 contracts. In 1995, 10 exploratory blocks were offered for Profit Sharing Agreements. This exploratory round entailed the payment of a bid bonus, and a total of 245 MMUS\$ were paid during this event. By 1997 the stage had already being set for a major step towards the opening of the Country, and 20 areas were offered during the Third Round, which received a total of 132 bids. Bid levels in the Third Round exceeded industry and PDVSA expectations by over a factor of four. Total bids received amounted to \$2170 MM for the 18 areas on which bids were received against a pre-bid PDVSA view of circa \$350 MM (Duke University 2000).

Figure 3- “Apertura” in numbers. Number of bids and cash bonus paid (MMus\$). Numbers above indicate the year of the event.



THIRD ROUND FACTS

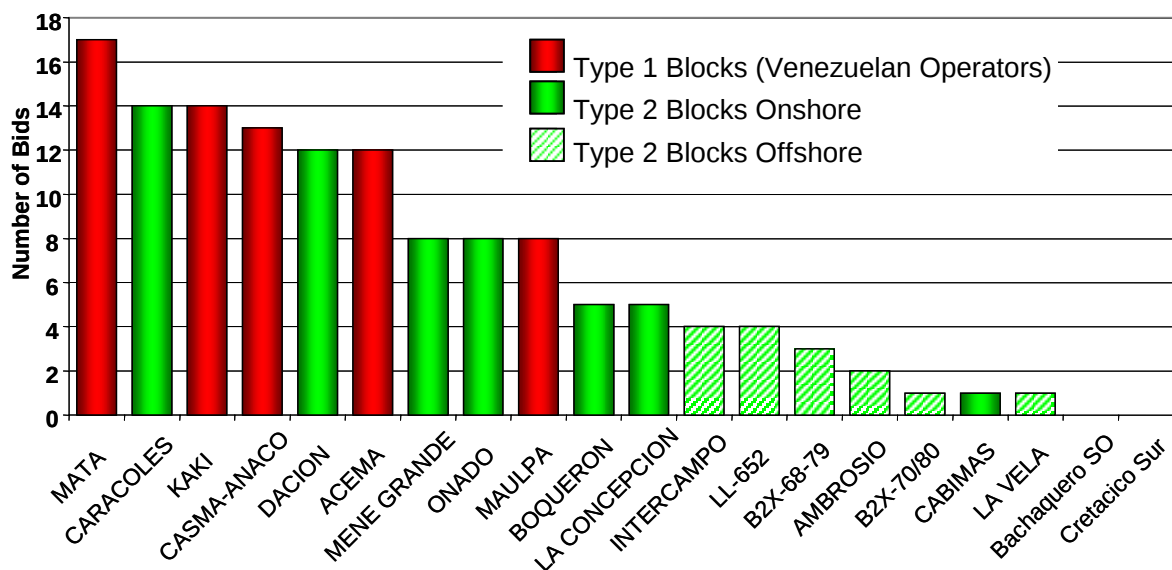
20 blocks were offered to the industry during the Third Round, of which 5 were only available to Venezuelan companies. The blocks were distributed geographically in the major producing basins, with 9 blocks in the Maturín Basin (Eastern Venezuela) and 11 blocks in Western Venezuela (Lake Maracaibo and La Vela Bay) (Figs. 1,2).

The Third Round contract limits the maximum take by the private company to a 30% rate of return (modified rate of return) according to a set formula. Payment is obtained on the incremental production above a set baseline curve. Production on the base is paid on a fixed basis as US\$ per bbl. Approved capital costs are reimbursed by PDVSA, and the total payment is tied to the API of the crude and the price of the crude according to a formula. Companies had to qualify on technical and financial grounds to operate the different fields and received a number of points according to their financial and technical strength. The bid was a cash bonus or “Factor de Valorización” (FDV).

BID RESULTS

There are several trends observed in the bidding patterns for these blocks. Blocks located onshore received, with only one exception, a higher number of bids than blocks located offshore (Fig. 4). There could be several reasons for this distribution, but it may reflect a perception at the time of the difficulties of operating in Lake Maracaibo, or may be the higher investments required for offshore development. Offshore blocks also received proportionately lower bids as shown in the relation between FDV (Factor de Valorización or Cash Bonus) and the Remaining Oil in Place, according to the PDVSA provided figures (Fig. 5).

Figure 4- *Number of bids received per Third Round block.*



A clear correlation exists between the FDV and the remaining oil in place figures provided by PDVSA for Category 1 (Venezuelan Operators) fields. In this case, winning bids paid between 0.08 and 0.30 US\$ per barrel of remaining oil in place (PDVSA figures)(Fig. 5). As a general rule, onshore Category 2 fields received bids with values above 0.13 US\$ per barrel of oil in place, Category 1 fields had bids in the range of 0.13 to 0.08 US\$ per barrel, and offshore Category 2 fields had bids lower than 0.08 US\$ per barrel of oil in place (Fig. 5). It is very likely that the remaining OIP figures provided by PDVSA in the offer documents were utilized as a yardstick to establish the bid bonus within Venezuelan operators since there is a very well defined correlation between these two parameters. This may explain why overall, Venezuelan operators left much less “money on the table” than other companies. As such in general, bidders for category 1 fields “overpaid” no more than 24% and general much less than the second highest bidder (Fig. 6). This may be explained because local companies relied more on the PDVSA figures and assigned a value to their remaining reserves in place. By doing so, the variability of the bids is greatly reduced. In contrast, there is a wide difference in valuation and thus the resulting bid for Category 2 blocks. In this case there is in general a large difference between the winning bid and the second highest bid (Fig. 6). This most likely reflects the difference in valuation criteria and strategies between non-Venezuelan companies as well as different estimates of remaining reserves and/or future production profiles.

FIELDS REVISITED

There is no official published public information on the current production of the Third Round Fields, and much less on the economic performance or cumulative capital expenditures. However informal scouting

estimates on current level of production are available. This information even though not official is considered to reflect accurately the current production levels achieved by these contracts. The total current

Figure 5- FDV in MMUS\$ vs. Estimated Remaining Oil in Place (as originally estimated by PDVSA in their original presentation to the industry).

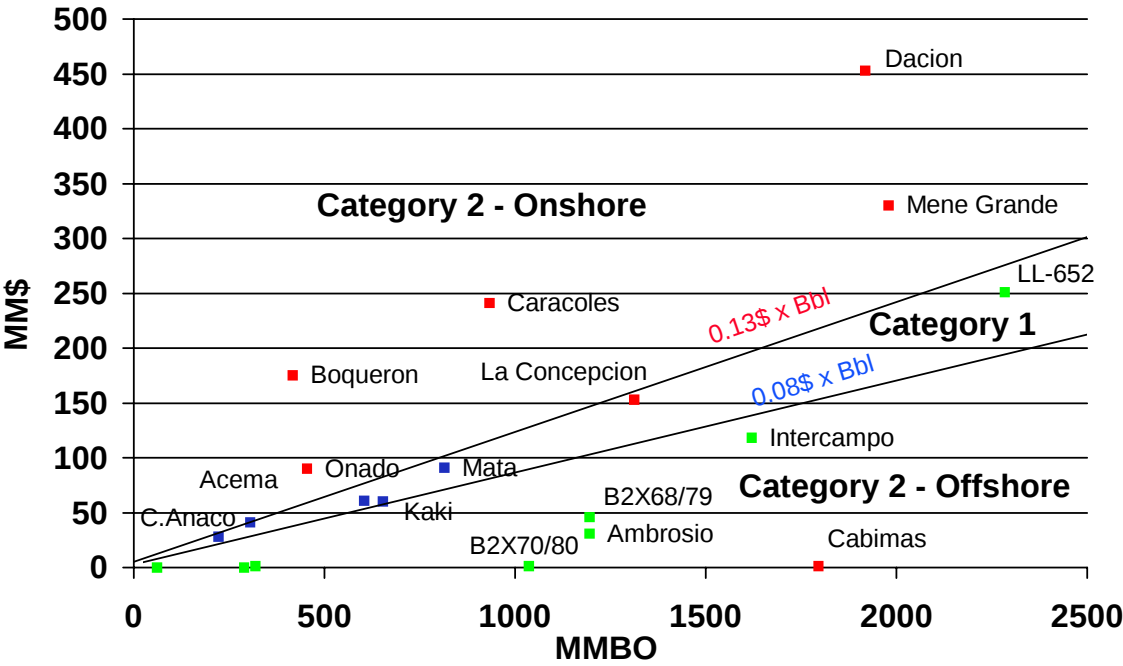
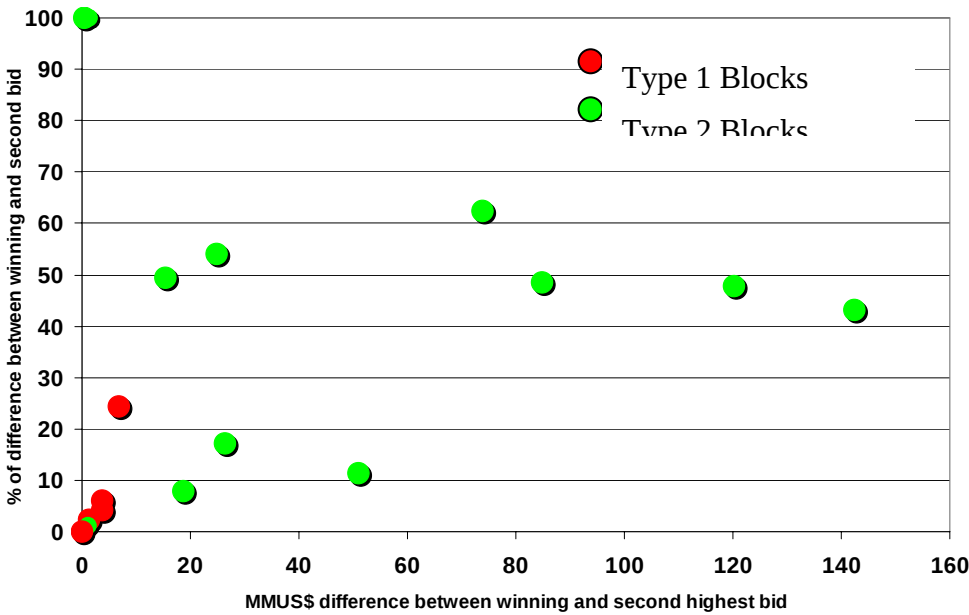


Figure 6- Difference between winning bid and second highest bid in comparison to percentage of difference of over-bid against second highest bid.



production from the Apertura, excluding the Strategic Associations (Orinoco Belt) is in the order of 709 MBOE per day (Fig. 7). The most productive are Second Round contracts while First Round contracts have

a more reduced contribution. However when viewed in a normalized manner (production divided by number of operating contracts), First and Second round contracts have similar average production of around 35,000 bopd per individual contract (Fig. 8). Third Round contracts have performed markedly worst with average production in the order of 13,000 bopd. Third Round Onshore fields in average have performed better than offshore fields, while the worst performers are those reserved for the Venezuelan industry (Fig. 9). This observation is most likely related to the inferior potential of the assets offered to the local industry and not to lack of expertise since most local companies have partnered with more experienced international operators.

Figure 7- *Production at November 2004 of different “Apertura” type of contracts.*

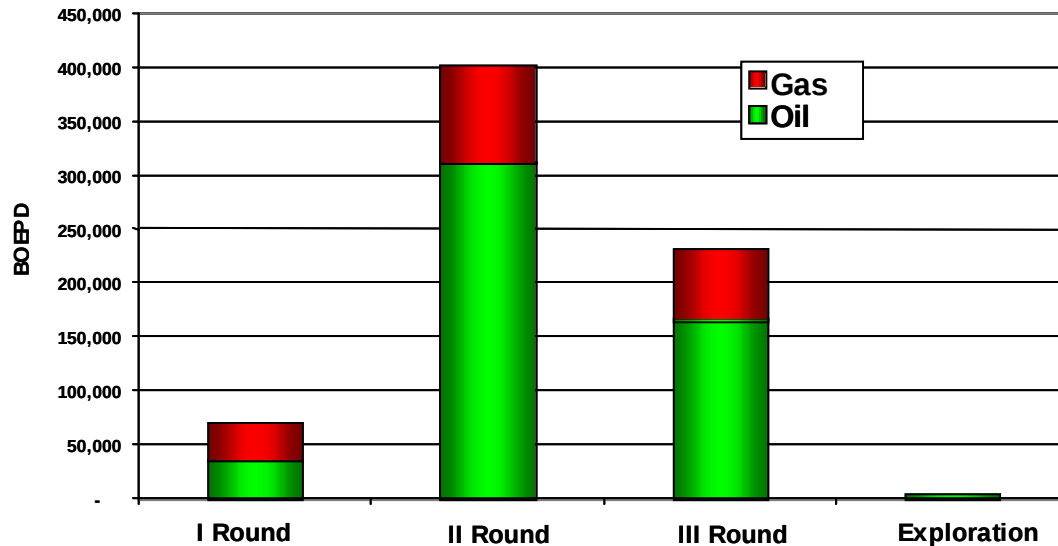


Figure 8- *Average production per type of contract*

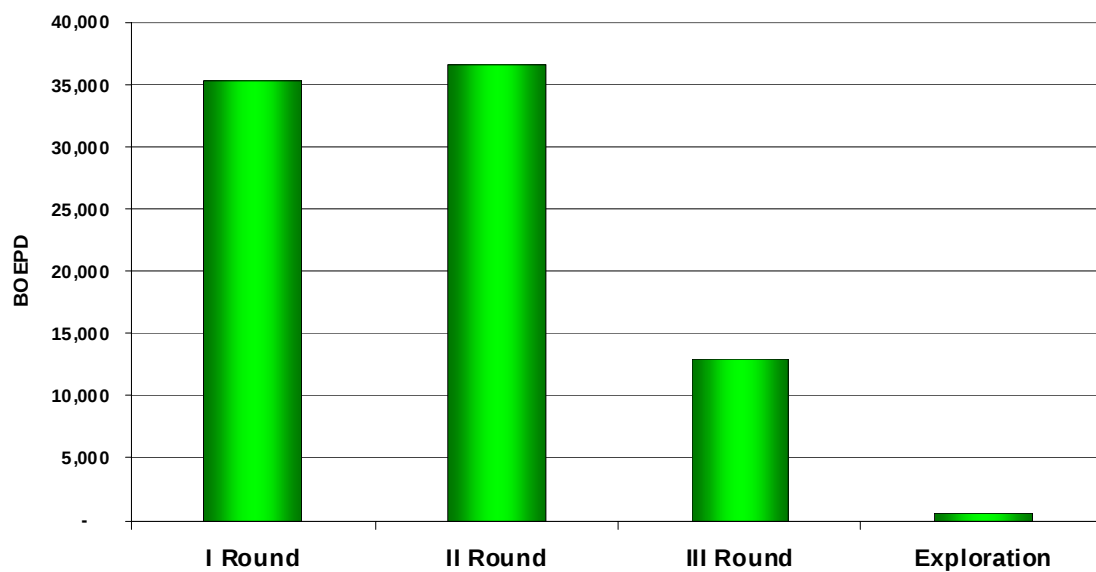
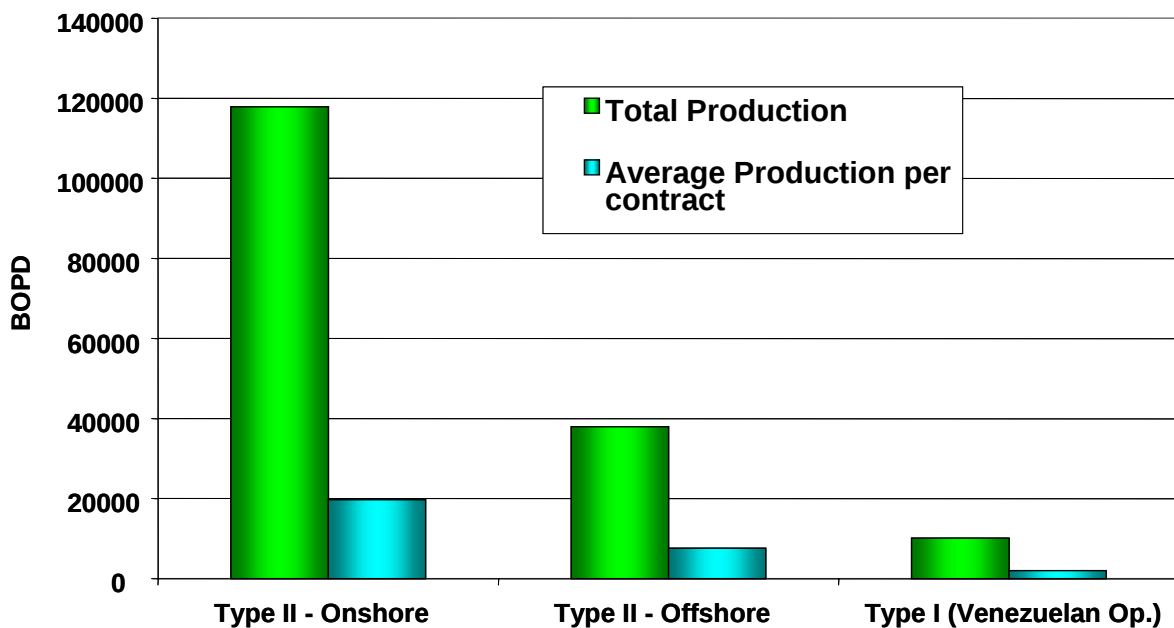
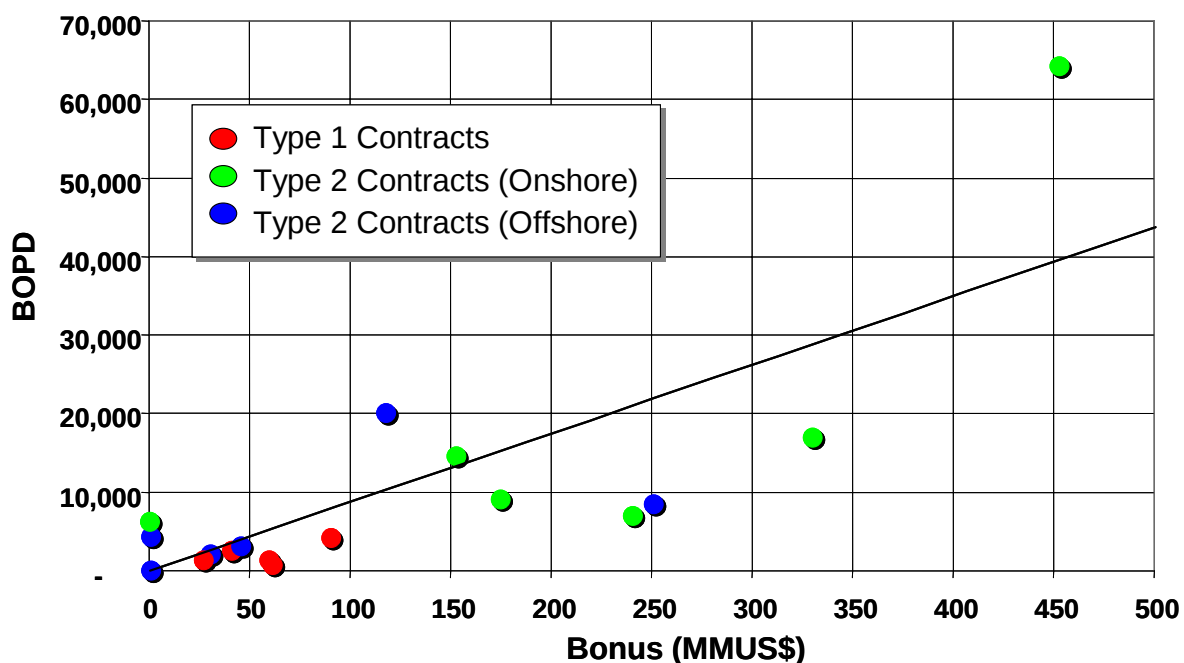


Figure 9- Production at November 2004 for Third Round Contracts



It is difficult to estimate the actual profitability of a field based on its current level of production, but in general Third Round Fields have underperformed the original expectations. Comparing the FDV paid vs. current production is not a measure of profitability but a yardstick that helps to evaluate and compare the original perception of the value of the field (as measured by its FDV) and the actual production achieved 7 years after the award of the contract (Fig. 10). Even though it is difficult to prove without having access to detailed expenditures and operating costs, it is estimated that most contracts have a marginal if not negative profitability to date when taking the cash bonus paid in 1997. If we make a linear regression of FDV vs. current production, the only clear trend is that Type 1 contracts have performed consistently worst than other contracts. This regression line does not imply that contracts above the line are money makers but that have performed better than the average in relation to the bid bonus paid.

Figure 10- Comparison between bid bonus (FDV) and current production for Third Round Blocks.



DISCUSSION

As mentioned by Johnston (2002), the oil industry has been affected by “chronic over-bidding”, which has been strongly influenced by increased competition and “over optimistic estimates of oil prices, costs, prospect sizes and success ratios”. In the case of the Third Round is clear that most companies have been affected by the “winners curse” which indicates that the winner is actually losing money by paying too much for a given property (i.e. Capen et al. 1971; Lohrenz 1988; Lohrenz and Dougherty 1983; Johnston 2002; McGill, and Wightman 1983; Tavares 2000).

Venezuela was possibly the most attractive country world-wide that was opening its doors to the private oil industry during the late 90's. Strategically it was desirable to be present in the country and the success cases of the First and Second rounds were clear examples that this was the place to be. With a trend of more elusive exploration discoveries the possibility of accessing potentially low-risk high-reward acreage attracted the major players of the industry. At the same time the prior rounds had eased the concerns that some companies had about the possibility of doing business in the country in the light of the nationalization of the oil industry in 1976. For the Venezuelan government the “Apertura Petrolera” represented the less risky way to almost doubling the production without devoting a large amount of its own cash.

At the same time the Venezuelan industry saw here the opportunity to become well established oil companies, similar to what happened in the previous decade in Argentina. A large effort was made to qualify on financial and technical grounds and thus become a “member of the Petroleum Club”. The process has helped mature the industry, but has left a bitter taste since most fields failed to materialize its originally perceived potential. After 7 seven years of activity, the Third Round has generated a much more mature Venezuelan industry, probably less optimistic, but these fields have failed to generate wealth to its investors.

Third Round fields are now producing around 232,000 boe per day. This production figure even though important, it is considerably below the original expectations. In general, this oil is relatively heavy and also relatively expensive to extract, so detractors of the “Apertura” criticize its results since it is claimed that the country should first concentrate in the lighter and easier to extract oil instead than on the relatively heavy and marginal reserves (i.e. Campbell 2004).

When analyzed in retrospective, Third Round bidders had probably a combination of objectives, which probably included a) to maximize present values; b) to maximize oil and gas reserves; c) to guarantee the presence in the country and thus pay a premium to become a “Venezuelan player”; d) an opportunity to enter into the oil industry. According to Lohrenz (1987) in similar competitive situations in the Gulf of Mexico, the recommended avenue is to maximize present values. However in the case of the Third Round, given the large sums paid in the FDV, very probably the other three reasons had a commanding influence. An inverse relation between profitability vs. number of bids was noted in the Gulf of Mexico (Lohrenz 1988), but in this case there is not a clear relation between number of bids received and current production. On a macroeconomic perspective, the Apertura as such has been positive to the country, but the net effect on the GDP has been less than expected (Duque Ramirez 2003). However, viewed in the present context of the country, “Apertura” blocks have helped to provide a steady supply of oil through the times of internal turmoil within PDVSA. In that sense today private companies are producing a relatively larger percentage of the Venezuelan oil and thus have produced a positive effect in reducing volatility at times of political change.

CONCLUSIONS

The Third Round contracts have currently a production of about 232,000 boepd. This figure even though important, is more modest than expected in 1987. Several companies are now benefiting from having production as a result of this bid round, but it is estimated that most of them have probably lost money on a full cycle basis. Particularly affected are the Venezuelan operators which bid for Type 1 contracts. Winning bids of Venezuelan operators were very consistent, and possibly based on some value assigned to the remaining STOOIP as described by PDVSA in the initial offering. The process has helped to mature a

few local operators, but with minor exceptions, has failed to create a local industry similar to what happened in the 80's in Argentina.

The "Winners Curse" materialized in most instances, and winning bidders have paid in general too much for their leases. Most likely the Third Round will be a turning point in the Venezuelan "Apertura". Currently all the "Apertura" blocks are producing around 709 M BOEPD (without considering near 370 MBOPD of heavy oil), a figure that highlights the importance of these contracts in the Venezuelan economy.

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