

Petrolera zuata case analysis essay sample

[Finance](#)



**ASSIGN
BUSTER**

PDVSA should go for project financing for the development of the Orinoco basin. PDVSA is not looking for financing of one deal, but at a chain of many deals which would be a public- private partnership between PDVSA and a foreign organization for development and up-scaling of the Orinoco Basin. Therefore, it is important that PDVSA maintains its cash and debt capabilities to address to future uncertainties. This would provide higher flexibility for PDVSA and at the same time better distribute the risk, providing a lower risk to the home company PDVSA. The costs attached with using project finance instead of traditional debt finance are:

1. High cost of political risk insurance would increase the interest rate associated with debt. As a result higher leverage through project finance would be costlier. 2. Chances of a negative carry due to inflow of large amount of funds via bond in the start, which would not have its usage then. As a result these bonds would fetch a lower investment grade and cause a higher interest drain leading to loss. The benefits associated with project financing instead of traditional debt finance are: 1. The probability of getting a higher investment grade for the project even when the country Venezuela had a rating of B.

2. Using project financing PDVSA can get into a joint venture which can be private and not public. Through this it can enjoy benefits currently being enjoyed by private equity firms. 3. PDVSA will preserve its debt capacity and hence have higher flexibility. 4. Through project financing it can approach larger private markets inviting more foreign investments.

Hence project financing for the venture is a better option.

WHAT ARE PETROZUATAA THREE OR FOUR MOST IMPORTANT RISKS? HOW DOES THE DEAL STRUCTURE ADDRESS THESE RISKS? WHO WOULD BEAR THESE RISKS IF THE PROJECT WERE FINANCED INTERNALLY BY PDVSA INSTEAD?

Soln.

Petrozuatas most important operating risks were:

1. **POLITICAL RISK:** the political risk associated with the downfall of the Venezuelan government and the unpredictability of the Venezuelan government to abruptly change the tax rate or the royalty posed a big risk for the investors.
2. **EXCHANGE RATE:** the other major risk associated with the Petrozuata project is exchange rate fluctuation. As the Venezuelan economy is developing there is a high risk that that the currency Bolivar would appreciate against dollar. This would increase the expenses and tax liability of the project relative to the sale income which would be in dollar, reducing the profitability of the project.
3. **OIL PRICE VOLATILITY:** the third major risk associated with the Petrozuata project, is the volatility of the oil prices. The oil prices have been fluctuating in a high range varying from \$8. 14 to \$37, and hence the risk of price volatility is very high. The deal structure addresses these risks associated with the petrozuata project through the following clauses:

1. Inclusion of the political risk insurance (PRI). This insurance would be given by reputed financial organizations like IFC, OPIC, EDC and US ExIm

bank. This political risk insurance would increase the lending rate by about 300bps over the borrowing rate, making the net borrowing rate to vary in the range 10.5% to 11.75%.

2. High debt coverage ratio of 1.35X as the bare minimum requirement. Even higher ratio of about 1.80X required for attaining an investment grade rating. 3. To account for the price volatility, the deal asked for a substantially low breakeven point of only \$8.63 per barrel, which can be easily achieved, even when the average market rate was \$14.27 per barrel. It was only once in the 10 yrs history that the oil price has gone below the \$8.63 mark down to \$8.14 mark.

4. Payment priority the cash water fall: to account for the high risks, the deal designed a cash waterfall model with the following priority of payments:

- a. 1st priority: to 90 day operating expense account.
- b. 2nd priority: to projects debt obligations.
- c. 3rd priority: to debt service reserve account for 6 months.
- d. 4th priority: to the equity holders.

Hence this way, the risk of the investors and the project is minimized. If the project were financed internally by PDVSA, these risks were to be borne by the home organization PDVSA and the home government. A part of these risks would also be shared by the banks providing capital to PDVSA, through higher interest rates for the high risk.

AS CURRENTLY ENVISIONED, DEBT WILL COMPROMISE OF 60% OF THE FUNDS NEEDED FOR THE PROJECT. WOULD YOU RECOMMEND A HIGHER OR A LOWER LEVERAGE RATIO? WHAT HAPPENS TO THE MINIMUM DSCR AND

<https://assignbuster.com/petrolera-zuata-case-analysis-essay-sample/>

IRR ON EQUITY AS THE PROJECT LEVERAGE INCREASES TO 70% OF THE PROJECT FUNDS? DECREASES BY 50%?

Soln.

We would recommend that the debt should compromise of the already decided 60% level of the total funds. This recommendation I based on the following findings and reasons: 1. At 60% leverage the firm earns an IRR of 26% which gives it measurable gains when compared to the cost of equity of 21%. Hence giving a definite 5% benefits over equity investment.

2. At 60% leverage the DSCR for the initial years is around 2. 06X and thereby increasing giving it enough margins to easily get an investment grade rating.

3. Also, at 60% leverage the DSCR is sufficient enough to cover the interest debt expenses in case of any price fluctuations, thereby covering the risk of price volatility and exchange rate volatility.

4. At a higher leverage of 70%, the DSCR in the initial years comes down to 1. 45X, making it very close to the minimum required DSCR of 1. 35X. Hence the risk associated with price fluctuations is very high, and there are low chances of getting an investment grade rating for the project. Hence a higher leverage is not recommended.

5. At lower leverage of 50%, the net IRR is 22% which is comparable to the cost of equity of 21%. Hence, at a lower leverage, the company has no benefits of going for project financing. Therefore a lower leverage is not recommended.

When project leverage is 70%: when the project leverage is 70%, the IRR increases to 32% giving it substantial returns. But at the same time its DSCR suffers and comes down to 1.45X in the initial years, thereby increasing its default risk and hence making it sub-investment grade project. But it still remains above the minimum required DSCR of 1.35X and hence the minimum DSCR is not affected.

When project leverage is 50%: when the leverage is reduced to 50%, the IRR suffers and comes down to 22% close to its equity cost of capital. Hence, the company gains no direct benefit of going for debt finance, as an equity financing would have earned the same return. Therefore the company loses on the advantages of a tax shield and lower cost of debt financing. However, the DSCR in this case becomes very robust at 2.06X, much above the minimum required value of 1.35X; again the minimum DSCR is not affected.

WHAT KIND OF DEBT SHOULD SPONSER USE TO FUND THE DEAL? WHAT ARE THE ADVANTAGES AND DIS ADVANTAGES OF EACH KIND OF DEBT?

Soln.

the debt sponsors should choose the private bonds (rule 144A bonds) for financing the deal. The reasons for using rule 144A bonds are:

1. They could be underwritten within a short time of only 6 months and require less disclosure.
2. Venezuelan economy was improving and had a better scope for investment.
3. The U. S bond market was heating up and hence a private issue of bonds to this market had a higher chance of getting large fund.

4. Private bonds could provide a requisite high value of debt of \$1.4 billion.
5. Getting such a high investment in a public bond market for an emerging economy project was highly unlikely.
6. The debt from banks would take a huge time of 18 months to arrange. Besides the interest rates charged by the banks is very high of the range of 10.5% to 11.75%, as compared to the market rates of 7.5% to 8.75%

The advantages and disadvantages of various kinds of debts:

1. Agency debt: the advantage of getting an agency debt is that they could get a large sum of unsecured loan (without PRI) of about \$200mn. However the major disadvantage was that a majority of the remaining debt would require PRI taking the costs to the ceiling.
2. Bank Debt: the advantage of getting the bank debt was that it could draw on its credit lines matching its cash inflows and outflows hence utilizing the best of the cash inflow. However the issues related to the bank debt were :

- a. Short maturity: it posed a serious risk in case of constructional delays and oil price volatility.
- b. Restrictive covenants
- c. Variable interest rates increasing the volatility and hence the risk
- d. And the smaller limited size of it.

3. Public bonds: the major advantage of going for public bonds was that it could provide with huge sum of capital as compared to other means and that it had a much longer maturity. However there was a serious issue of the negative carry which could lead to losses.
4. Rule 144A bonds: these were the private bonds and had the advantage that it could be executed very easily and in a short time of only 6 months. However these were dependent

<https://assignbuster.com/petrolera-zuata-case-analysis-essay-sample/>

on the Venezuelan economic stability and the U. S bond market. Hence a change in any of it could impact the offerings and therefore the risk associated was higher.

AS ONE OF THE SPONSORS, WHAT ARE YOUR EXPECTED RETURNS? ASSUME THE ASSET BETA FOR AN INTEGRATED DRILLING, PIPELINE AND REFINING FIRM IS 0. 60.

Soln:

Internal rate of return calculated is coming out to be 26% at 60% leverage ratio. To be profitable for a shareholder, the cost of equity should be less than the internal rate of return. Since debt is not constant over the years, the ratio of equity to value will change over time and hence a single cost of equity cannot give a true picture of the situation. Calculation of cost of equity over the years is calculated in the table below.

We can see the cost of equity in the early years due to large amount of debt is high around 2728% which declines over time to around 18-19%. Hence on an average the cost of equity for a shareholder will be around 20-22%.

Also it should be noted that when calculating the internal rate of return for 50% leverage, the IRR turned out to be 22%. This shows that if we would have opted for 50% leverage ratio, then we would have not generated adequate returns.

WOULD YOU INVEST IN PROJECT BONDS? WOULD YOU INVEST IN EQUITY CAPITAL AS CONCO?

SOLN. We would prefer investing in project bonds because they provide a 26% return, as compared to the 22% cost of equity that I would be paying. Hence it would provide me a net 4% to 6% relative benefit in investing in project bonds. Therefore we would prefer investing in project bonds.

As Conco, investing equity capital is not a preferable option. As seen from the solution to question 6, the costs of capital averages about 21% with its lower end about 18.6% percent. If Conco invest large equity capital, the debt leverage of the project goes down; as a result its IRR goes down. Hence, if Conco invests equity the profitability of the project reduces. If the leverage reduces below 50% due to investment of equity, the equity investment provides a negative return as IRR would be below 22% the estimated cost of equity capital. Hence Conco should not invest in equity capital.

HOW SHOULD PDVSA FINANCE ITS OTHER OILFIELD PROJECTS?

PDVSA should finance its other oil field projects using project financing keeping a similar debt ratio of 60%. PDVSA should go for project financing for the following reasons:

1. Higher returns can be earned via leveraged project financing, as compared to the traditional financing.
2. PDVSA can go for higher leverage of 60% and 70% via project financing. If it goes for traditional financing, it cannot get such high leverage and the leverage would be close to its own capital structure.
3. The projects can get a higher investment grade as compared to PDVSA or the Venezuelan country.

4. A joint venture project financing, would invite foreign firms to invest thereby inviting liquidity into Venezuela helping improve its financial status.
5. By going for a project financing, the project would become a private project and not a public project and hence would not be bound by numerous government regulations.