An economic evaluation of an emerging gas exporter's upstream petroleum fiscal policy: The case of Mozambique

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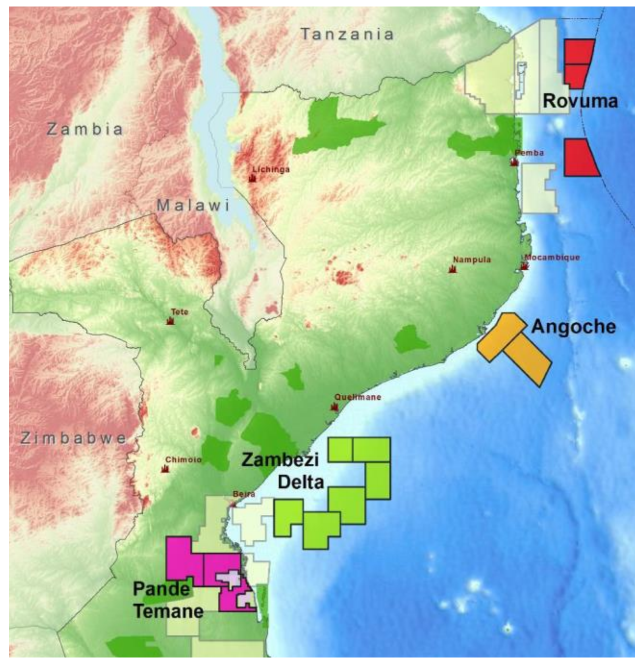
Introduction/Background

- Recent gas discoveries estimated above140 tcf;
- Petroleum taxation policy framework has been recently revised and approved;
- The study aims to assess: stability; flexibility, neutrality of the Mozambican fiscal system;
- The likely impact of the fiscal system on investors' decisions and government take.



Research Questions:

- How can government take be maximized?
- How re(pro)gressive is the taxation system?
- Sources of dissipation of economic rents?
- How can the taxation devices be improved?

Frequently Raised issues:

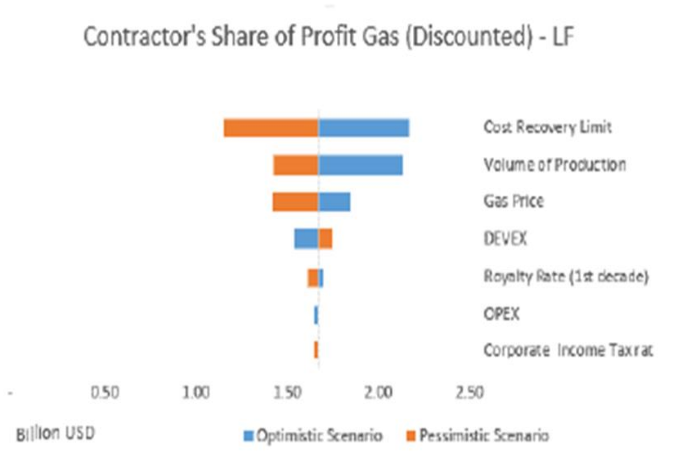
- The competitive/comparative (dis)advantage of the country's taxation regime vs competitor gas exporters';
- The Pande/Temane's contractual arrangement transfer pricing pitfall;
- Fiscal transparency.

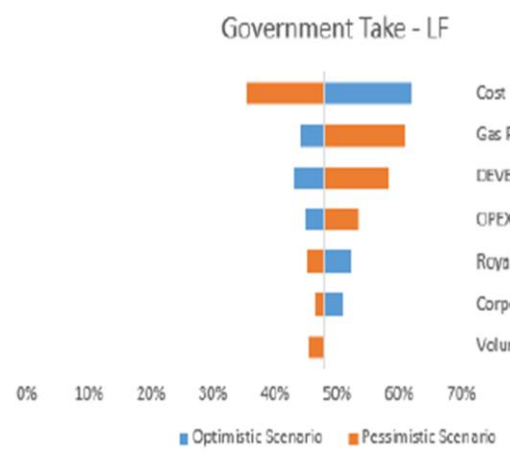
Methodology

- Discounted/Net Cash Flow Analysis in 3 model fields (deterministic/probabilistic assumptions)
- Sensitivity Analysis over the company's and governments financial performance
- Monte Carlo (MC) Simulation – @Risk (Palisade)

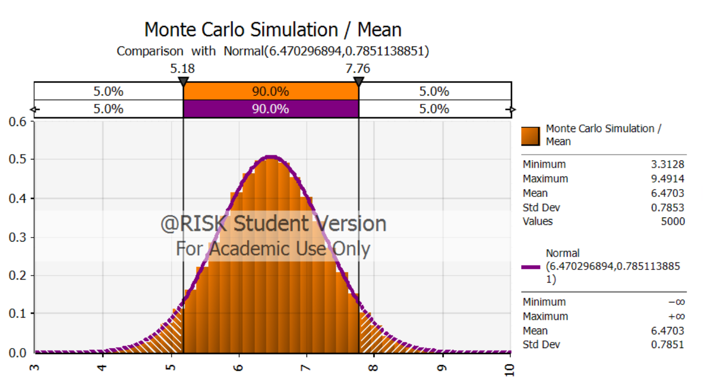
Results

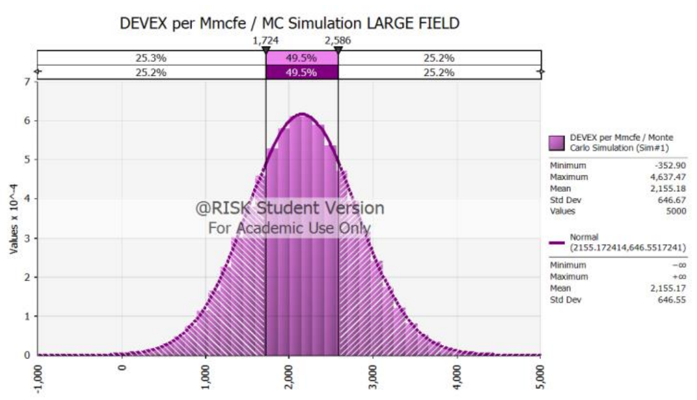
- The cost recovery limit is the most influencing parameter of contractor's share of profit gas
- The investor's Post-tax NPV is highly sensitive to: gas price, DEVEX, cost recovery limit and OPEX
- The government take increases (decreases) under pessimistic (optimistic) scenarios of the DEVEX, OPEX and gas price – *Regressive Feature*





- The MC simulation shows a low probability that the gas price may fall below the worst-case scenario, providing *higher Stability to Investment Decisions.*
- 90% chance that it will lie around the tested interval
- The DEVEX is relatively unstable dependent variable if compared to the gas price as there's only a 50% chance that it will lie within the tested interval, therefore enhancing investor's uncertainty and posing threat to anticipated government take.





Conclusion/Recommendations

- The Mozambican taxation regime was found to be very regressive and not well related to gas companies' profitability under the current tax terms.
- It was also found that the higher is the field size the higher becomes the impact of the cost recovery limit over the government share of profit gas. This makes the government's appropriate decision regarding the cost recovery limit imposed a determining factor over the share of profit gas collected by the government.
- A sliding scale method is recommended to be applied to the cost recovery limit (CRL) and to the royalty applied if government take is to be maximized efficiently, neutrally and flexibly.
- Under a low-price scenario a high cost recovery limit could sustain the investments that might be forced to be deployed or delayed. A decreased CRL can contribute to increased government take under favourable marker conditions.
- The government has no control over market conditions such as price. However it exerts a slight influence over DEVEX in regards to the waived or imposed VAT as well as over the DEVEX and OPEX as far as the local content obligations imposed by the government are concerned.
- The local content obligation clause imposed to investors might be a source of rent dissipation if the industry is not competitive enough to provide efficient services and prices to gas companies.

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