

Comparative Economic Analysis of Production Sharing Contracts in Republic of Cameroon and Republic of Congo (Brazzaville)

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Motivation and Research Question

- This study analysis the degree of optimality of the fiscal regime in the case study between Cameroon and Congo (Brazzaville) under oil price shocks.
- We address the following core questions based on the fiscal regimes in these two countries
 - Do the respective fiscal systems meet the optimality test given within the literature?
 - How efficient are the fiscal terms in the two countries in collecting and maximising economic rents from a fiscal policy perspective?
 - Are the two fiscal terms in their present status enough to encourage upstream foreign direct investments? That is, do they lead to an equitable distribution of revenues between host governments and oil operating companies?

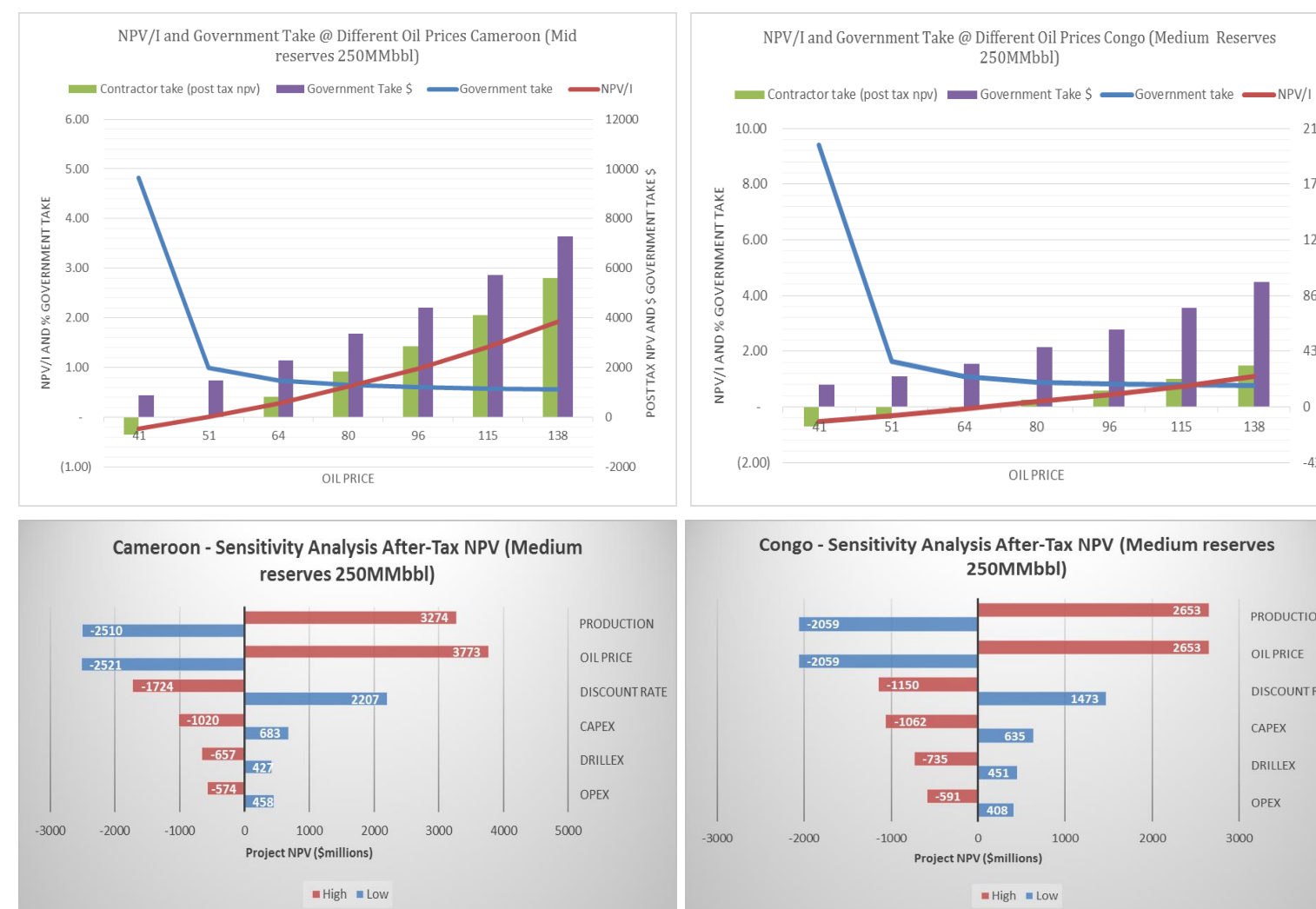
Data and Methodology

- Principal assumption such as discount rate, inflation, oil price escalation factor, and oil price itself are modelled in an Excel spreadsheet to produce results for analysis.
- A deterministic approach was performed using the oil price of \$80/bbl during the base case scenario with an oil price escalation of 3.5%.
- Random walk of the oil price has been produced to demonstrate the oil price shocks and Monte Carlo investigation has been commissioned

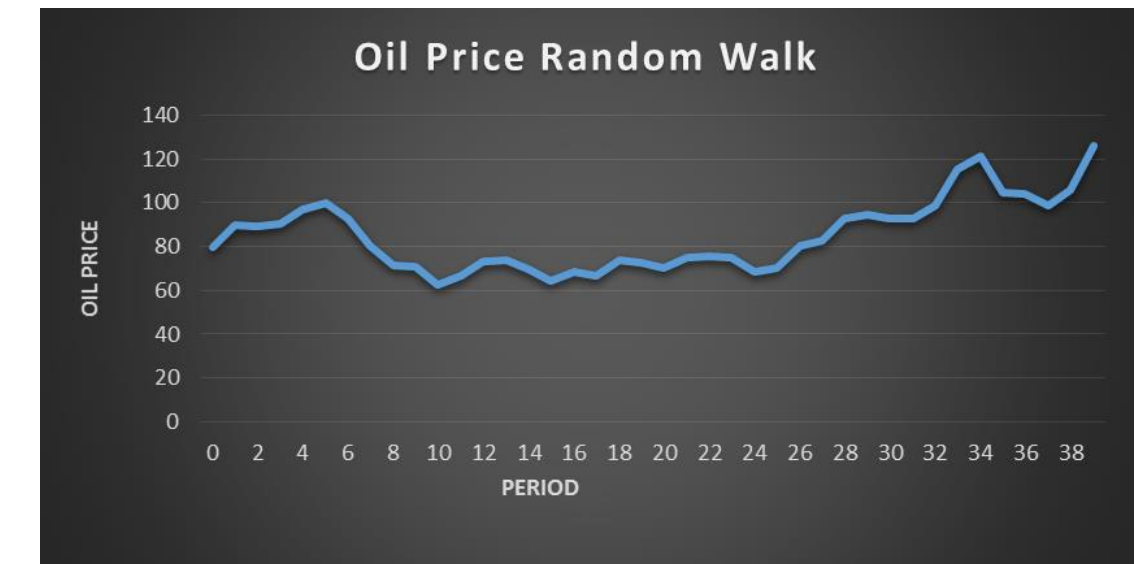
$$P_T = P_{T-1} * (1 + (Random_Number * SD + Average_Growth))$$

Results

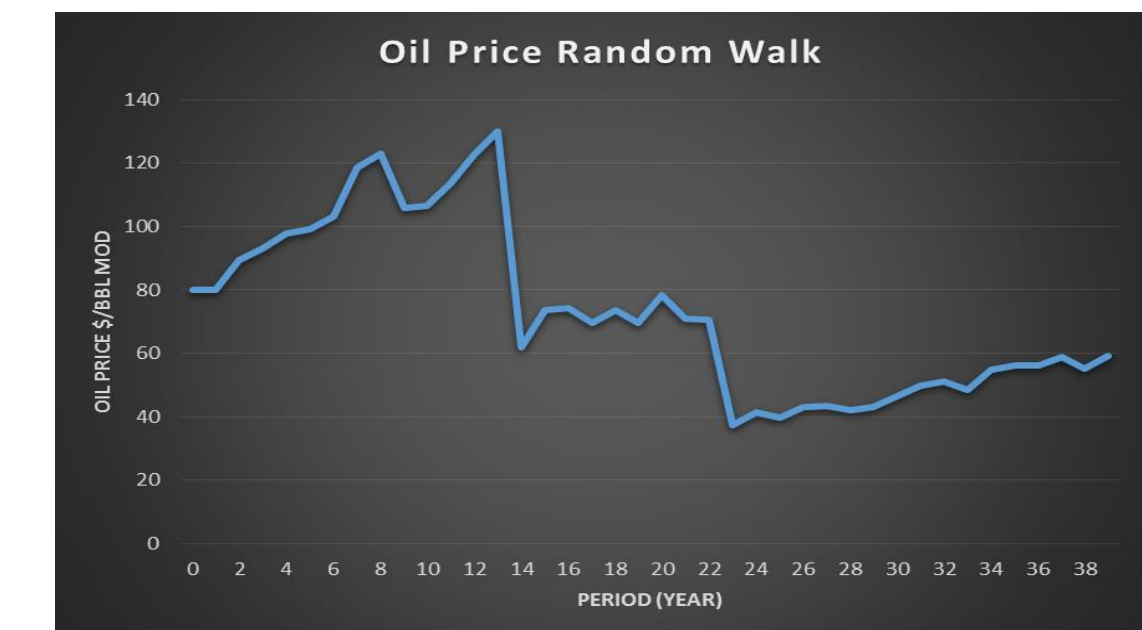
Country / Type of Regime	Republic of Cameroon Production Sharing Contract (PSC)	Republic of Congo (Brazzaville) Production Sharing Contract (PSC)
Royalty	None	15%
Bonuses	Both signature and production bonuses in effect	None
Revenue Taxes	None	None
Local Taxes	None	None
Fees	Surface rental fees, registration fees, stamp duties, FOSHY, training obligation	None
Cost recovery	Typically around 60%, negotiable	50%
Excess Cost Oil and Gas	All to profit pool	Shared between Government (65%) and Contractor (35%)
Profit Oil and Gas	Based on either R-factor, production rate or cumulative production and typically ranges from 40% to 80% for the contractor	Two-tier profit sharing system with shared upside (70% / 30%) and normal profit oil split according to cumulative production
Special Taxes	None	None
Corporate Tax	Rate varies by contract between 38.5% and 50%	35% which is paid by NOC on contractor's behalf by the Congolese government
State Participation	Conditions of state participation defined in each petroleum Contract	Participation is through SNPC, which is part of the Contractor group with 15% working interest



- Oil price random walk without shocks



- Oil price shock 50% price drop in period 14 and 23



Conclusion

- The study concluded that the fiscal regime terms for both countries are more or less favourable to the investors
- Giving the relative degree of no progressive regime, Congo could adopt a sliding scale royalty which could remove the distortionary effect. Whereas Cameroon could have adopted a minimal sliding scale royalties' dependent on geological prosperity since it is already a producing country.