

# THE USE OF PRODUCTION SHARING CONTRACT AS A STRATEGIC MANAGEMENT TOOL FOR OIL AND GAS COMPANIES IN NIGERIA

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## INTRODUCTION

- Host governments aim to capture enough economic rent for their state while companies aim at maximising their return on investment.
- Optimal fiscal system balances both objectives. Hence captures enough economic rent without causing a distortion to investment.
- Nigeria's oil and gas operations were initially based solely on the Joint Venture Agreement (JVA).
- The inability of the government in honouring cash calls majorly led to the adoption of the Production Sharing Contract (PSC) in Nigeria.

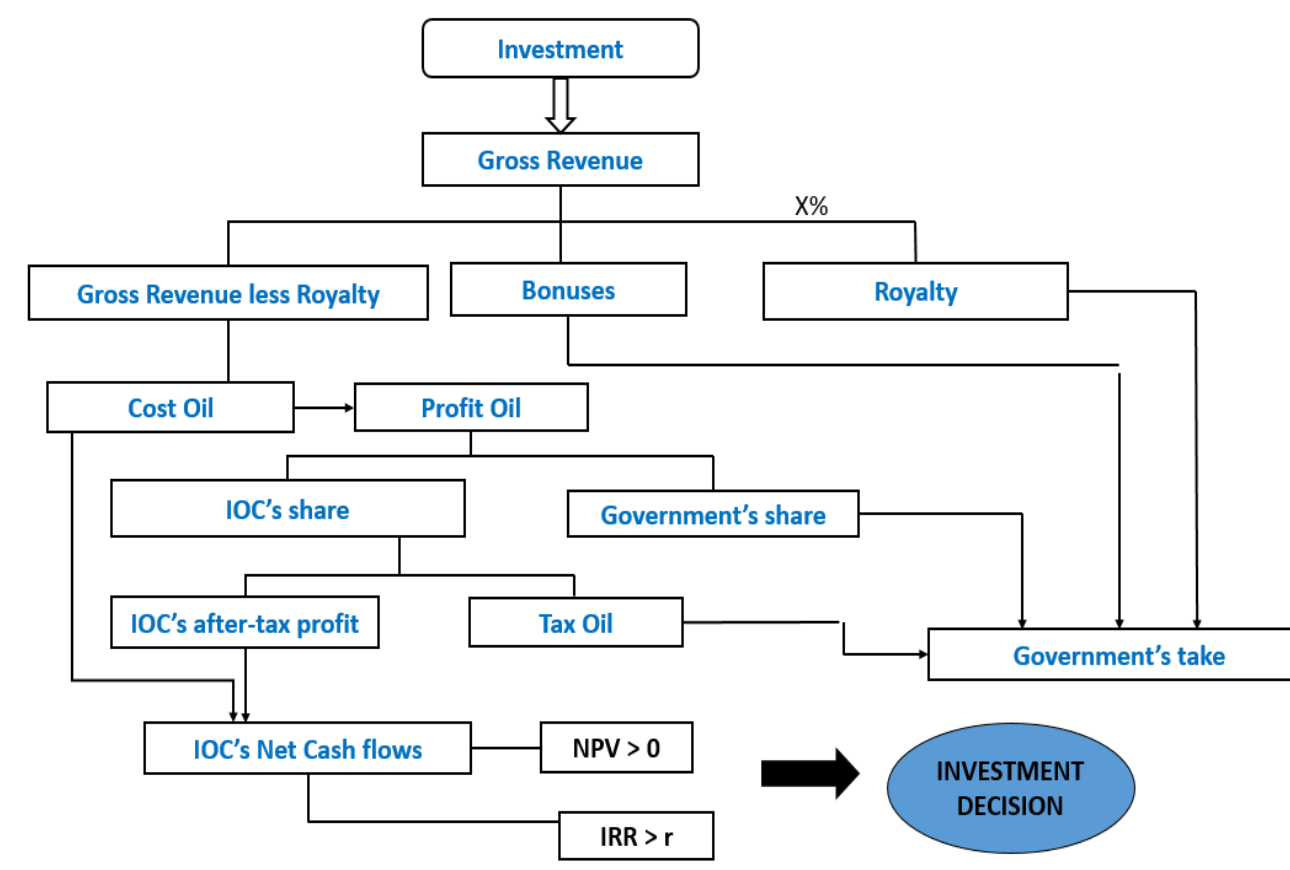
## OBJECTIVE

- This study highlights the importance of the Nigerian PSC terms in investment decision making for oil and gas companies
- Nigeria's fiscal system is compared against Angola's fiscal system in determining the best fiscal system for investment.
- Lessons to be derived are considered for increased investment in Nigeria.

## METHODOLOGY

- Deterministic cash flow analysis via NPV/IRR
- Stochastic evaluation using Monte Carlo simulation
- Sensitivity analysis

Fig1: Model Description



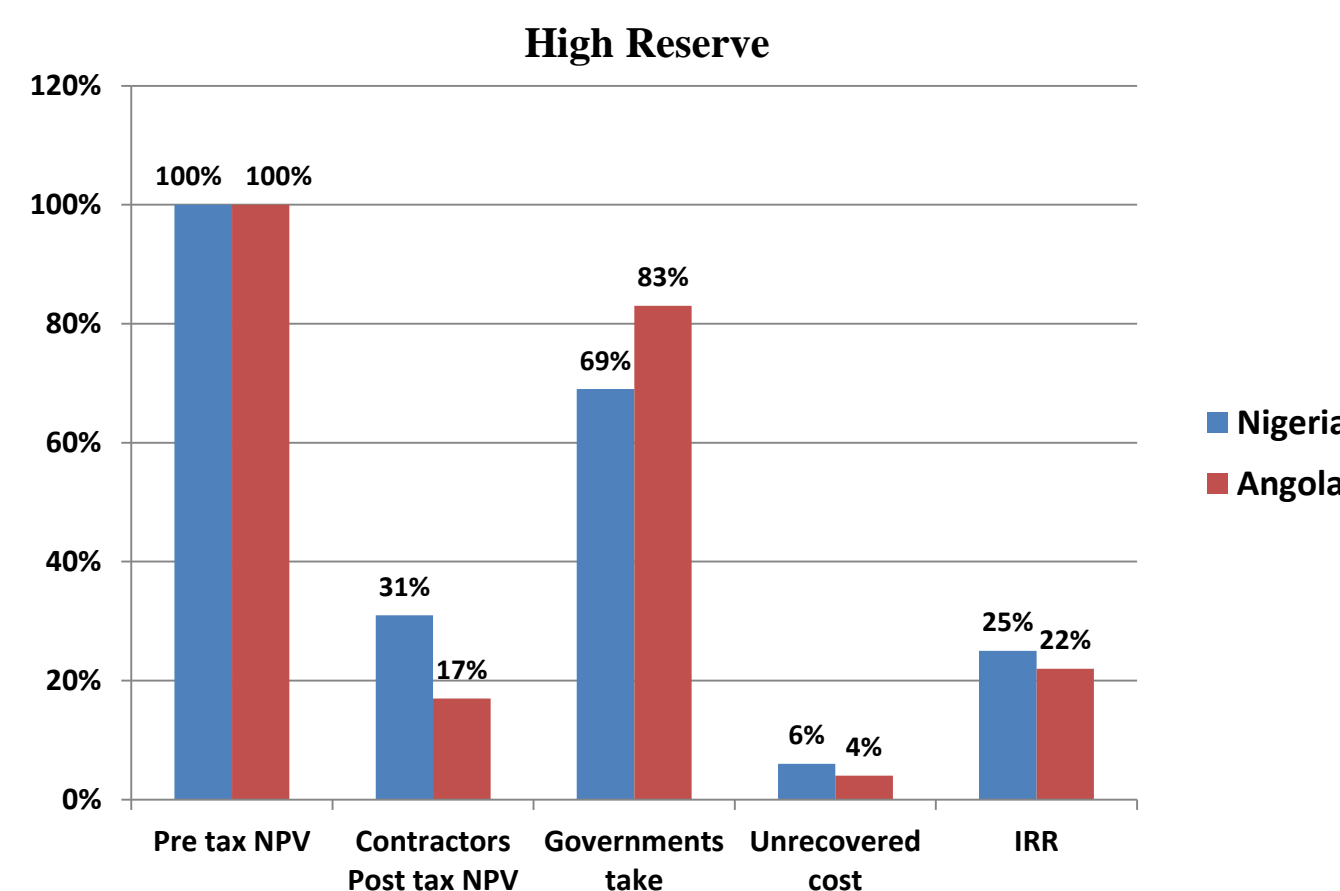
	Nigeria	Angola	Nigeria	Angola
Reserve	High	High	Low	Low
Pre tax NPV	\$9,220,706,090	\$9,220,706,000	\$1,562,006,758	\$1,562,006,758
Contractors Post tax NPV	\$2,894,254,050	\$1,540,358,000	\$332,458,100	\$217,180,000
Governments take	\$6,326,452,040	\$7,680,348,000	\$1,229,548,655	\$1,344,825,000
Unrecovered cost	6%	4%	9%	9%
IRR	25%	22%	16%	15%

- Monte Carlo simulation was conducted using stochastic variables like the oil price, development cost per barrel and operating cost per barrel.

	Deterministic result	Stochastic result	
		P10	P90
High Reserve (NPV)	\$2,894,254,050	\$3,618,150,000	\$8,816,580,000
Low Reserve (NPV)	\$332,458,100	\$264,710,000	\$1,585,150,000

- Sensitivity analysis: Increase in oil price indicates a positive correlation with NPV while Increase in costs shows a negative correlation with NPV and vice versa.

## RESULTS



## CONCLUSION

- The results indicate that the Nigerian fiscal regime is more favourable to investors than that of the Angola.
- The costs recovery provision in Nigeria could be improved as compared to that of Angola.
- From the result, it can be concluded that the Nigerian PSC regime encourages investment and hence could achieve the objective of companies.
- The inability to get accurate data from the countries involved poses as a limitation to this study.