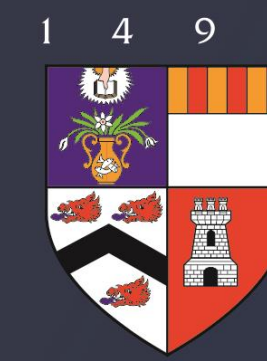


AN ASSESSMENT OF THE IMPACT OF OIL PRICES ON ECONOMIC RENT COLLECTION AND UTILIZATION: A CASE STUDY OF GHANA

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BASIS FOR STUDY

- Discovery of oil draws attention to the huge share rents
- Oil price is a major determinant of economic rent
- Fiscal system can affect;
 - The level of investment in the oil sector.
 - The amount of rent collected
 - Amount allocated to Petroleum Funds

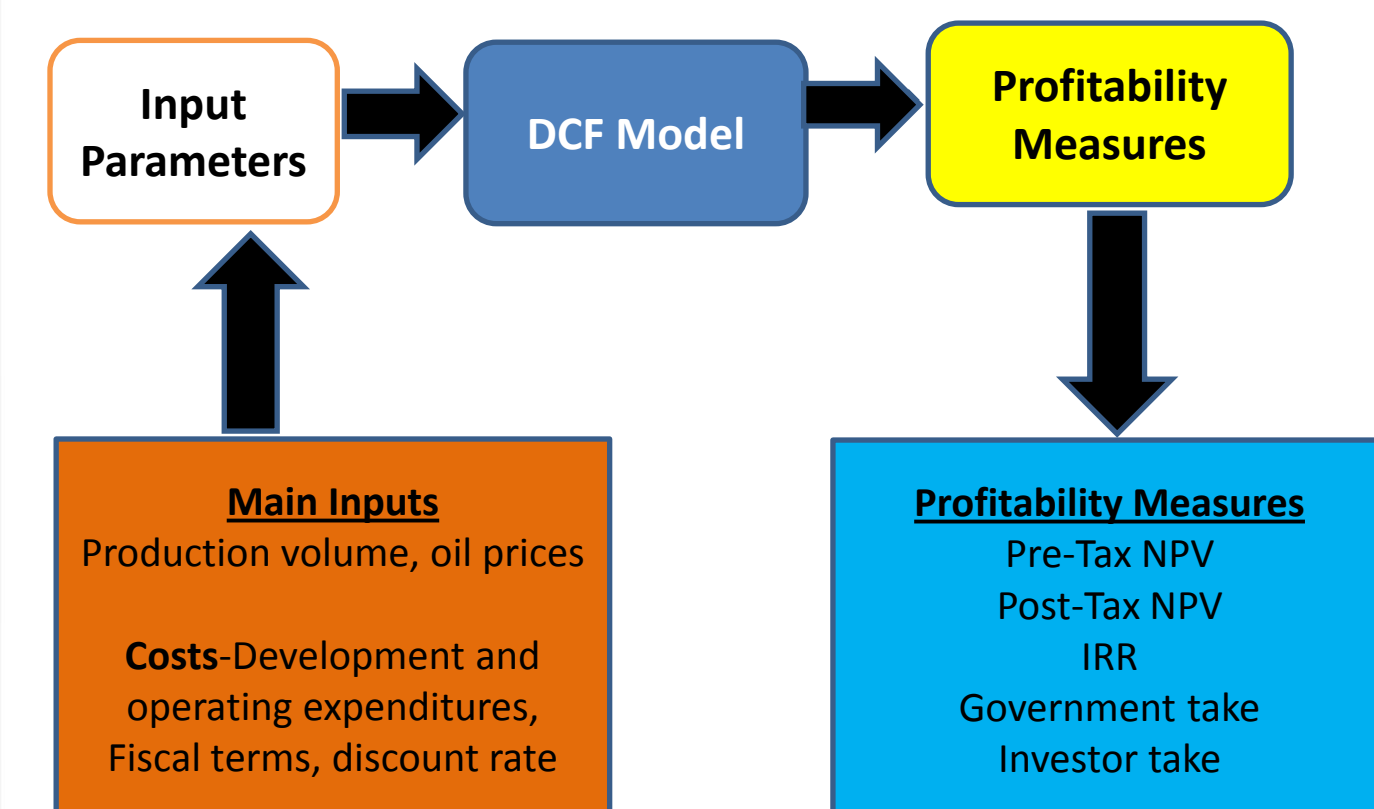
Ghana's Fiscal regime summary

Fiscal Terms	Rates	
Royalty	5%	
PIT	35%	
Dep. Allowance	5 years Straight Line	
Additional Oil Entitlement	Threshold	Rate
1st Tier	20%	5%
2nd Tier	25%	10%
3rd Tier	30%	15%
4th Tier	40%	20%
5th Tier	> 40%	25%

METHODOLOGY

Model oil fields of sizes 100mmbbls, 250mmbbls and 500mmbbls

- DCF Model Analysis
- Sensitivity Analysis
- Monte Carlo Simulation – To account for uncertainty in oil prices

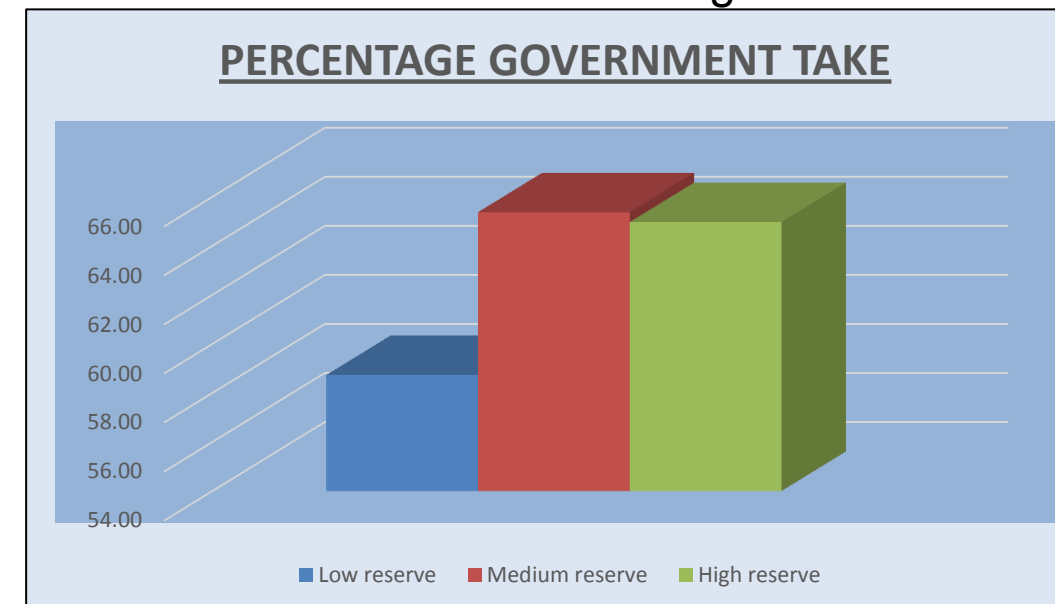


RESULTS

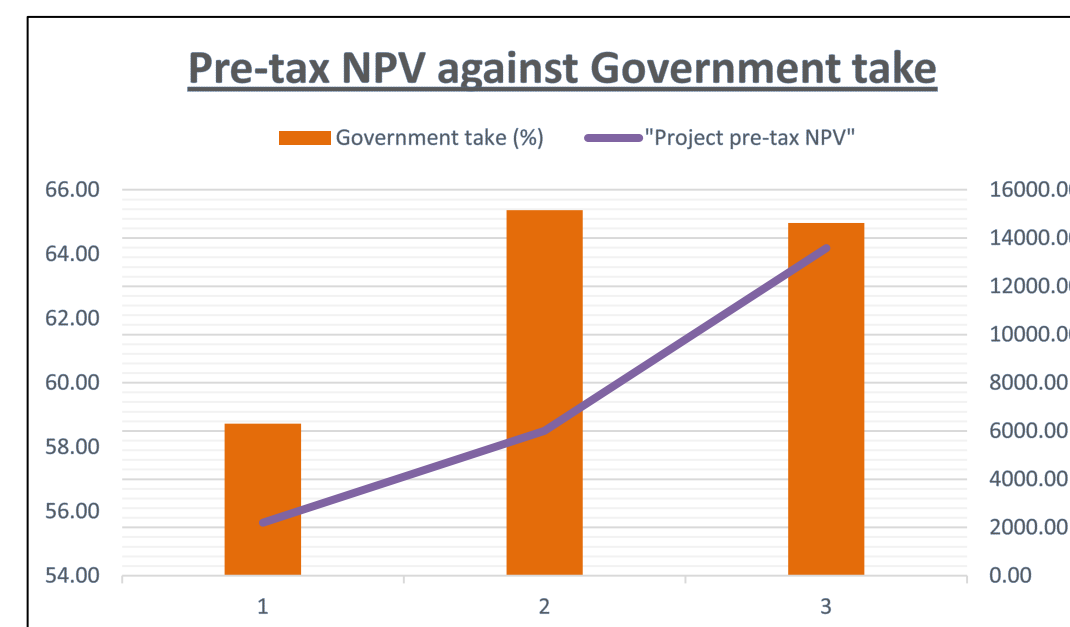
Project Profitability

Present Values	Low Reserve	Medium Reserve	High Reserve
Pre-tax CF(\$m)	3418.94	10292.14	23728.59
NPV at 10% (\$M)	1961.55	5556.80	12620.47
IRR (%)	64.33%	74.34%	97.88%
Post-tax CF(\$m)	2222.31	6382.18	14866.66
NPV at 10% (\$M)	1045.91	3560.18	8134.53
IRR (%)	44.10%	61.04%	80.01%

Government take decreased at higher field sizes

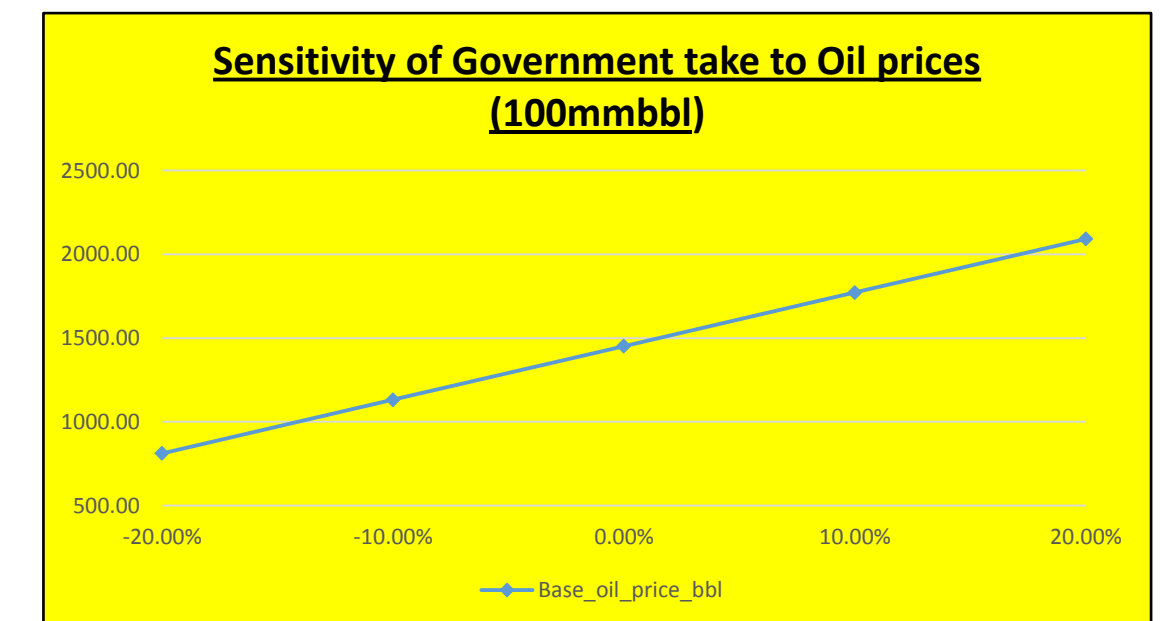
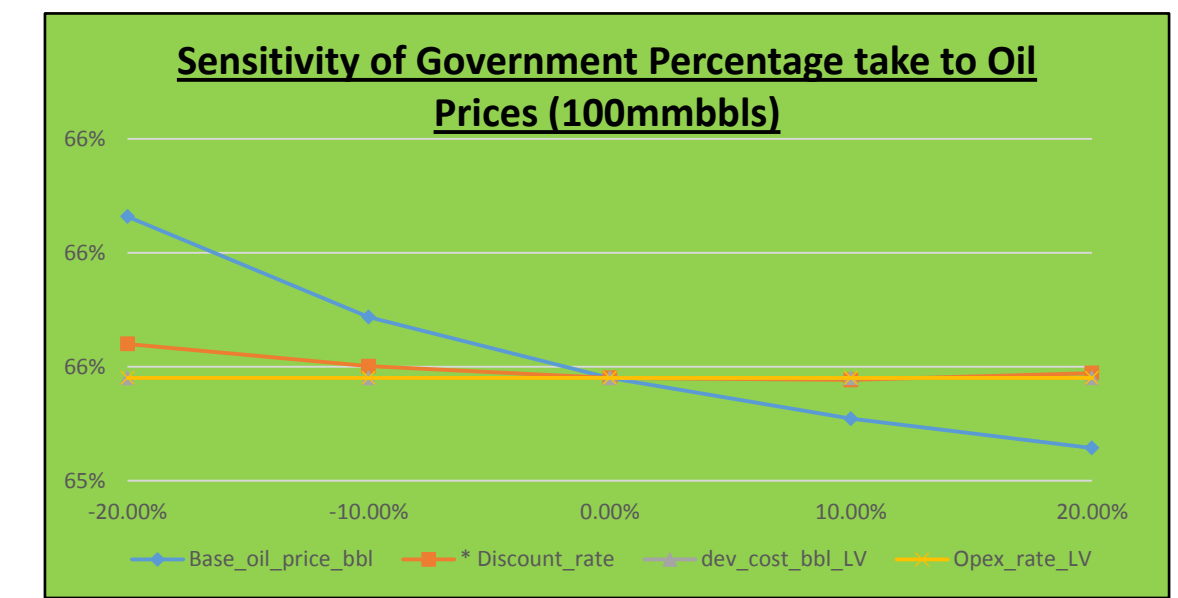


The Ghanaian Fiscal system acts regressively with increase in profits.



Sensitivity Analysis showed some interesting results;

- Percentage Government take was not flexible with changes in oil prices
- However, the total Government take (monetary terms) increased as the prices increased
- This translated into the Petroleum revenue funds



CONCLUSION

- ❖ The Ghanaian fiscal system acts regressively as oil prices and production field sizes increase.
- ❖ The regressive nature of the fiscal system however does not affect the amount of funds allocated into the Petroleum Funds hence its utilization.
- ❖ The Government (monetary) take has a direct relationship with oil price. As petroleum funds are allocated based on the Government take, it also has a direct relationship with oil prices.