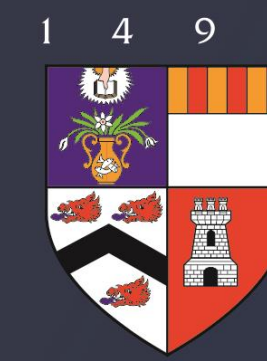


Title: An Assessment of the Production Sharing Contracts of Liberia

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Research Questions

Do the terms of PSC's encourage investment?

What PSC model is a better contracting mechanism for Liberia's oil sector?

Introduction

- First licencing round began in 2004
- Liberia awards first PSC based on model contract
- Oil Discovered in February, 2012.
- At least 15 PSC's currently in existence
- Terms of Model PSC revised in 2013

Contract Terms	Contract 1 (LB 13) - Revised Model	Contract 2 (LB 14) - Base Model		
1. Cost Recovery Limit	No more than 70% of production per year	No more than 70% of production per year		
2. Royalty	Based on water depth (meters)			
	Water Depth	Rate per month		
	0 - 1500	10%		
	1501 +	5%		
3. Corporation Income Tax	30%	25%		
4. Depreciation allowance	20%	20%		
5. Production Bonus				
Production Rate per day	Bonus Amount (US \$ Million)	Bonus Amount (US \$ Million)		
30000	3	3		
50000	5	4		
100000	100	6		
6. Profit Oil Share				
Production Rate	Government Share	Contractors Share	Government Share	Contractors Share
0 - 10000	40%	60%	35%	65%
100001 - 15000	50%	50%	47%	53%
150001 +	60%	40%	55%	45%

- Performance of both PSC's is interesting to study because government might use any of the two in the future

Methodology

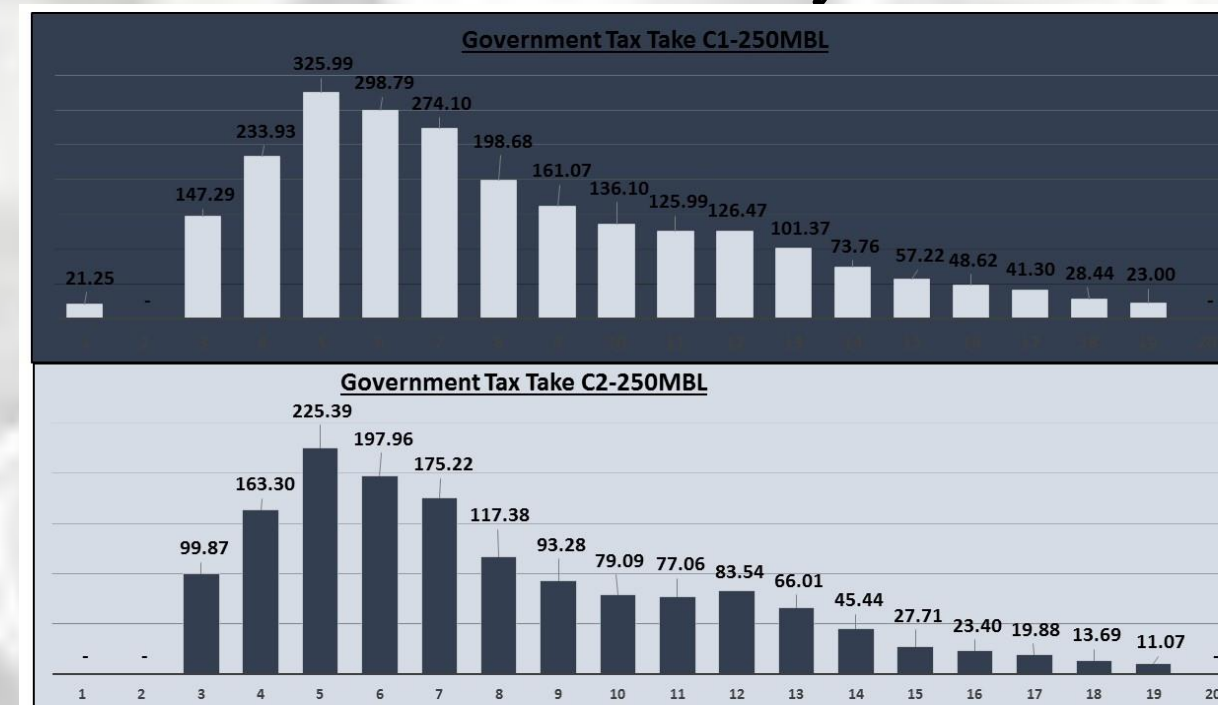
- Discounted Cash flow to determine
- Sensitivity analysis
- Monte Carlo Simulation

Results and Analysis

- Discounted Cash flow analysis
 - Investment encouragement

ECONOMIC MEASURE (Present Value Terms)	FIELD 1 (50MMBL)		FIELD 2 (250MMBL)	
	Contract 1 - RM	Contract 2 - BM	Contract 1 - RM	Contract 2 - RM
Total ENPV (US \$ Million)	903.86	925.11	4024.80	4872.43
Government NPV on Profit Oil (US \$ MM)	518.37	493.55	1798.69	1779.89
Government Tax Take NPV (US \$ MM)	347.22	229.15	1281.88	826.38
Total Government Take NPV (US \$ MM)	862.58	722.69	3080.57	2606.27
Contractors Post Tax NPV (US \$ MM)	35.28	202.42	944.23	2266.16
Pay Back Years	6	5	6	6
Contractors Post Tax IRR	12%	23%	21%	26%
Profit to Investment Ratio (US \$ MM)	0.04	0.19	0.25	0.61
NPV Devex (US \$ MM)	862.63	862.63	2900.13	2900.13
Post Tax NPV Devex Ratio (US \$)	0.04	0.23	0.33	2.63

-Government tax take analysis



- Base model \Rightarrow Higher contractors ENPVs, lower government take
- Revised model \Rightarrow Lower contractors ENPV's, higher government take

Conclusion

- ENPV of both contracts were favourable (no negative ENPV for any field)

Which contract is better?

- Impossible to say...
 - The Base model PSC – Favours investors over government.
 - The revised model PSC - favours tax collection over ENPV distribution.
- Government to choose between PSC model trade-off