Assessing the Impact of Transition Risks on the Economic Viability of the East African Crude Oil Pipeline (EACOP)

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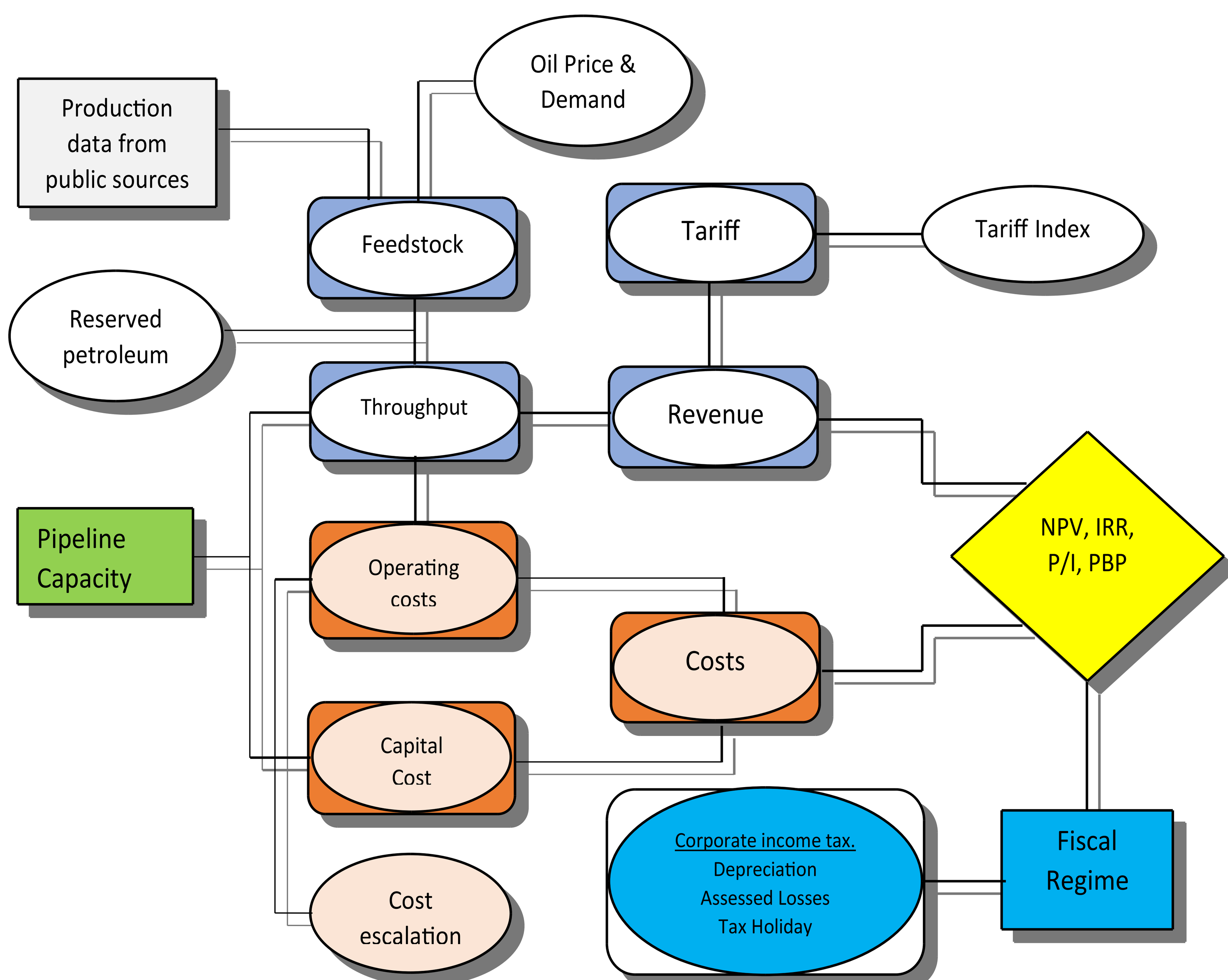
Background

- Uganda's upstream development is heavily reliant on EACOP to access international markets.
- Project FID taken in Feb 2022 but external financing (60% of $3.55bn) yet to be secured.
- Energy Transition through climate policies is expected to lead to gradual reduction in oil demand and oil prices (IEA).
- Risks to the pipeline; increase in cost of capital; reduction in production/throughput; non-optimal tariff; project cost escalations.

Methodology

- Economic Model using excel spreadsheet.
- DCF valuation techniques; NPV, IRR, PBP, P/I
- Sensitivity analysis and Monte Carlo simulation.



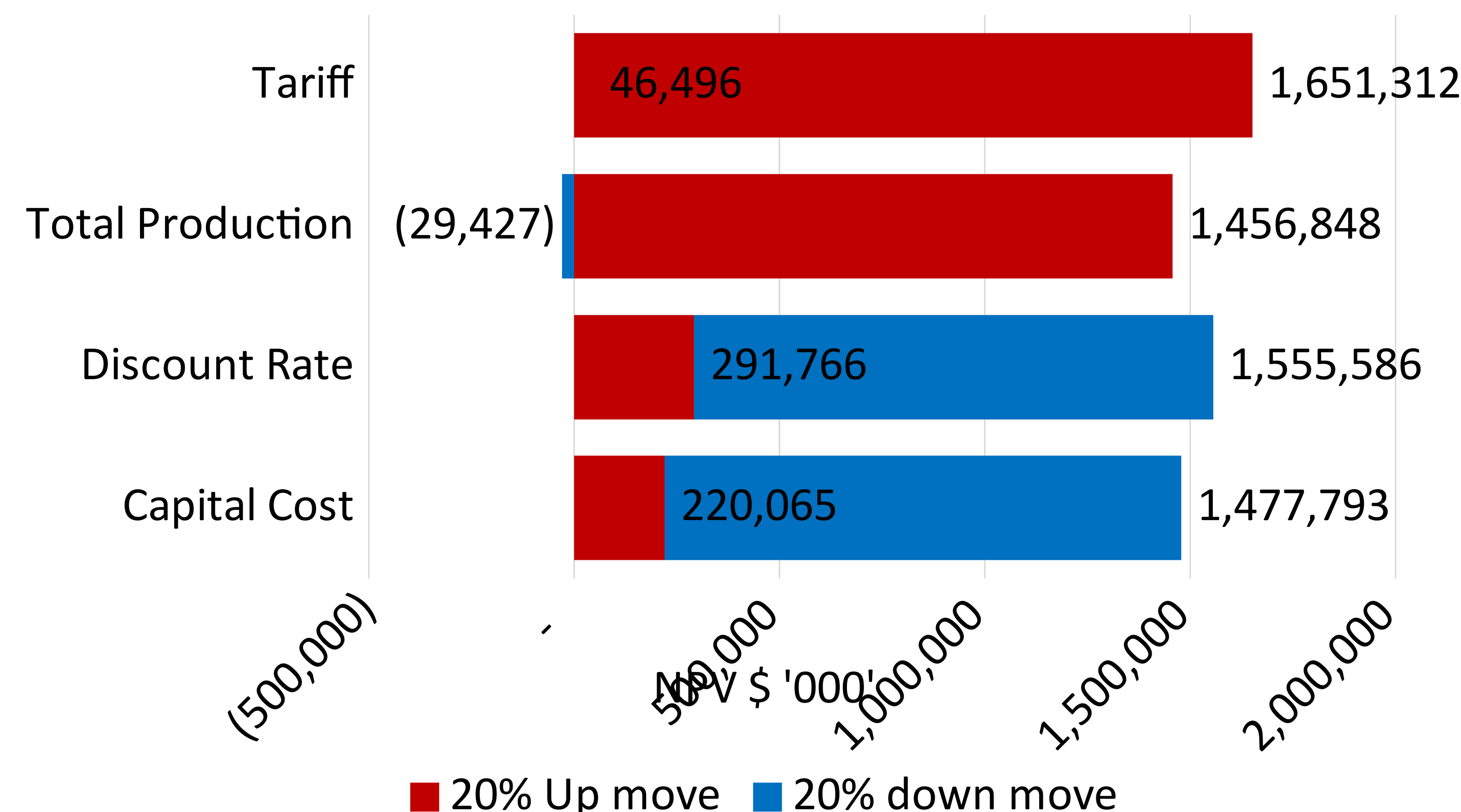
Results

Summary results for the Base case – BAU scenario ($ '000')

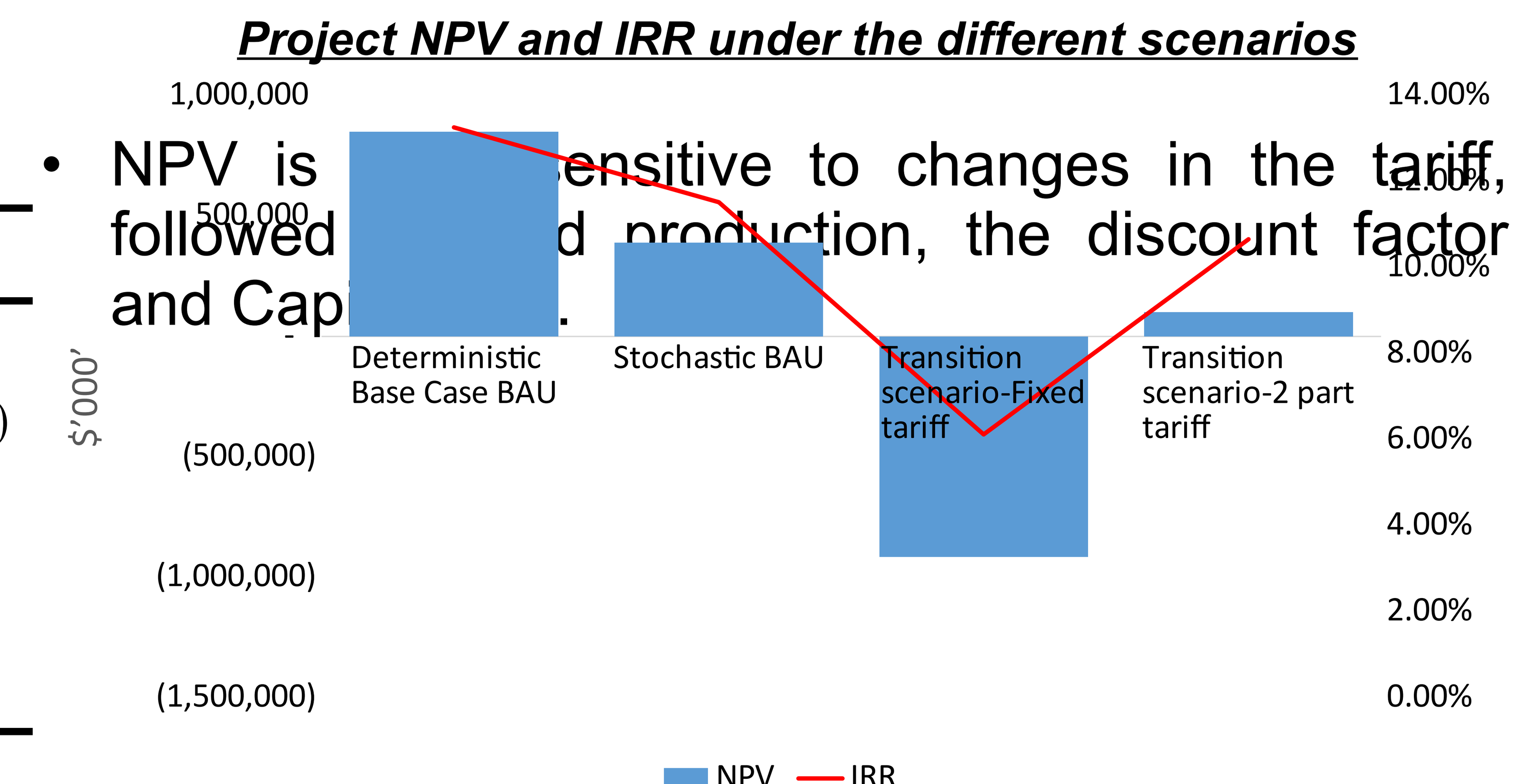
Metric	Pre-Tax Value	Post-Tax Value	Tax Take
Net Cash flow	7,949,225	7,307,836	641,389 (8%)
NPV	957,753	848,974	108,779 (11.4%)
IRR	13.56%	13.26%	
P/I Ratio		0.26	
Approximate Simple Payback		8 Years	

- Project is commercially viable with a fixed tariff of $12.77 per barrel and all expected production from the existing Uganda oil fields realized.
- Small tax take due to a 10 year CIT holiday, one of concessions from the governments for FID.

EACOP Tornado diagram on post-tax NPV



Project NPV and IRR under the different scenarios



- NPV is … ensitive to changes in the tariff, followed … d production, the discount factor and Cap … .

- Project viable with both the deterministic and stochastic Business-as-usual (BAU) analysis using a fixed tariff.
- Project becomes highly unprofitable in the transition scenario using a fixed tariff.
- However, a 2-part tariff for capacity and usage makes the project profitable with a post-tax NPV of $100.03m under the same assumptions.

Recommendations

- Project delays increase exposure to future climate risks, project developers should stick to current project timelines and avoid future loss in value.
- Review of the robustness of the set tariff against the climate transition scenario. A 2-part tariff applied together with price discrimination may be more suitable than a fixed tariff.
- Government should boost production by increasing recoverable reserves; offer interested IOCs relatively attractive fiscal terms given the current market risk.

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