

Please find the modelling test instructions below. **Please confirm receipt.**

You are kindly requested to read the instructions below carefully and to provide your excel file via email by **3pm UKT today** (i.e. you'll have 4 hours to complete the test). No need to join Teams.

Best of luck!

Thanks,

John Fitzgerald Kennedy



Jackie Modelling test

JFK partners is looking to a 50km toll road in Senegal which is used by two types of users (cars and trucks). The toll road has a life until 2050 after which point it will be decommissioned (note to modeller: please assume time horizon extends to 2055 for sensitivities). In order to present views on valuation, please set up a simplified financial model on a semi-annual basis using the below assumptions.

Assumptions

Acquisition parameters

You will acquire the toll road as of 31/12/2024 which will be funded by a mix of equity and acquisition financing.

Acquisition Financing

JFK has been able to secure senior acquisition financing with the following terms:

- 15 year tenor
- Sized on a 1.35x DSCR, 80% loan to value cap
- 3% all-in cost of debt
- 1% arrangement fee

DSCR = CFADS/Debt Service

Debt Service = CFADS/DSCR

PV of Debt Service at Interest Rate = Debt

Debt is capped if it is above 80% of total acquisition cost

Macro

All revenues and costs are assumed to escalate by CPI, which we forecast to be 2%. First period of index applies on 1st January 2025

Operational Parameters

The toll road construction was completed in 2024 at a construction cost of \$100m and COD is 31/12/2024 i.e. at acquisition.

Revenues

Toll rates are \$5 / car and \$10 / truck.

As of 2022 average daily traffic on the toll road is 3,500 cars per day and 1,500 trucks per day. From and including 2025 car traffic grows by 3.0% p.a. and truck traffic by 2.0% p.a.

Use indices not one formula

For car traffic only, there is an ongoing discussion that if car traffic exceeds 5,000 cars per day, JFK will need to pay the government \$3 / car (real 2022) for the portion of traffic exceeding 5,000 ("Revenue share").

Use min function here not if statement
Use a true/false flag

Please implement this as a functionality that can be activated or deactivated depending on the outcome of those discussions.

Opex

The toll road has both variable and fixed opex. \$2 p.a./vehicle paying tolls (2025 real) and \$10k/km (2025 real)

Working Capital

30 day sales outstanding
60 day payables outstanding

Tax

Corporate tax rate of 20% assumed to apply; for simplicity no limitation in terms of deductible interest/expenses assumed.

Accounting depreciation is assumed to equal tax depreciation. Capex assumed to depreciate straight line over 20 years.

Creates circular reference because taxes are affected by interest and taxes affect CFADS and CFADS drives debt size which drives interest.

Outputs

1. JFK Partners would like to determine the headline price it could pay for the asset while achieving 8% equity IRR if it were to hold the asset to the end of life with no Revenue Share payable to the government. The **Base Case**
 - a. JFK partners would like to determine what the impact on returns would be if it were to acquire the asset at the Base Case in the following scenarios:
 - b. Inflation + / - 0.5%
 - c. Variable Opex + / - 10%
 - d. All-in costs of debt + / - 25bps
 - e. Decommissioning +/- 2 years
 - f. Revenue share is payable to the government
2. JFK Partners would like to determine the headline price it could pay while achieving a 8% equity IRR if it were to hold the asset until 31/12/2030 and sell-down to an investor that would value the asset at an 7% equity IRR.