INVESTMENT ANALYSIS CASE STUDY

UNIVERSAL SWAP - LIQUIDITY POOLS

SUMMARY

Question 1

METHODOLOGY

- The actual project i.e., operation of the liquidity pool 'ALTERNIUM' goes on for 10 years from 2023 to 2042.
- The R&D expenses as well as investment in the infrastructure occurs in the year prior to the inception of the project i.e., 2022.
- The number of participants (both new and existing) plus the growth in the same is computed with the help of the data given.
- Flat rates and service charges inclusive of inflation growth of 1.5% is calculated.
- Total revenues = (Revenues from flat annual charges and service charges + Account receivables + inventory)
- Total costs = (R&D expenses + Infrastructure costs + Server facility cost + G&A expenses + Advertising expenses + Accounts payable)
- Pre- tax = Total revenues total costs
- Tax payable is 10% of the revenues
- After-tax = Pre-tax tax payable

ASSUMPTIONS

- Depreciation of infrastructure of 80 million dollars every year is considered as an expense.
- Existing G&A expenses allocated is used to finance G&A expenses of new project.
- US & Russian participants as well as existing internationals are charged at existing business rates while new international are charged at subsidized rates.

Question 2

METHODOLOGY

- Net profits i.e., after-tax cashflows are used to compute the net present value.
- Cost of capital is taken as 11%.
- IRR is calculated using goal seek such that NPV = 0
- NPV profile is computed at various rates (6%, 8%, 10%, 15%, 20%). The NPV's are compared and graphically expressed.

ASSUMPTIONS

• All cashflows are assumed to be in arrears.

Question 3

METHODOLOGY- Method used to compute IRR and NPV profiles is the same as above.

ASSUMPTIONS

- The project is expected to have a life of 20 years i.e., 2022-2042.
- The flat rates and service charges and their respective growth rates is assumed to remain the same as earlier.
- The participant growth however ceases after the 10th year as the pool will be at full capacity by the end of 2032 (year 10).
- Since there is no increase in the number of participants after the 10th year, no additional servers will have to be installed and hence no server facility charges are incurred by Universal Swap.
- Since the project now goes on for 20 years, it is assumed that the infrastructure of 1 billion dollars now reaches a salvage value of 200 million dollars by the end of 2042. Hence, the annual depreciation value is 40 million as opposed to its 80 million value when the project went on for 10 years.

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SECTION-A

ROLL NO-3